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Hospital Management

The News and Technical Journal of Administration

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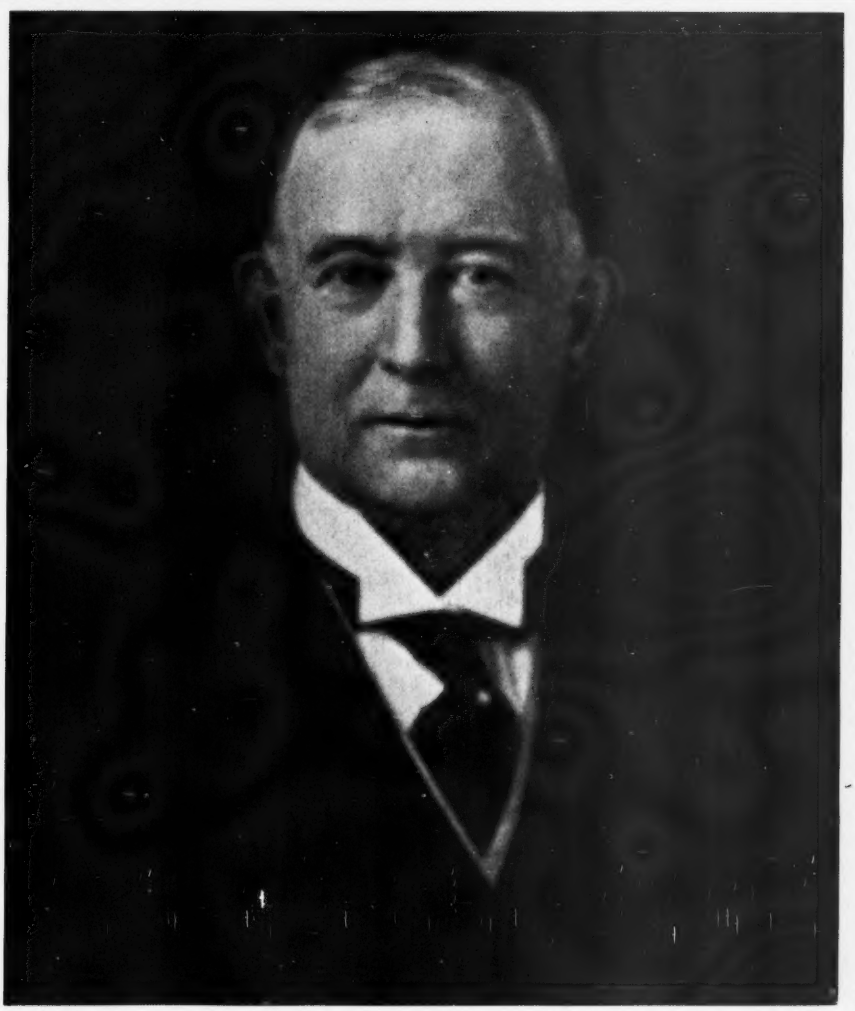

The late James B. Duke, founder of The Duke Endowment, which, during the past 15 years, has given major assistance to the voluntary hospitals in North and South Carolina. See page 16.

August, 1940

Coordinated Hospital Care Necessary to National Defense »» Analysis of Hospital Service in Oregon Shows Specific Needs

A Long Needed HOSPITAL BED
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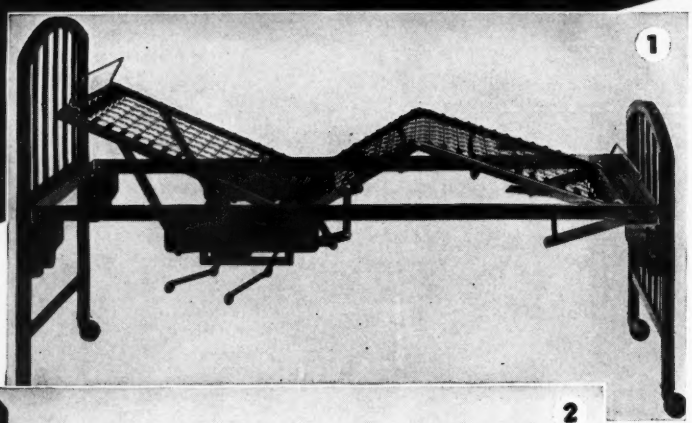

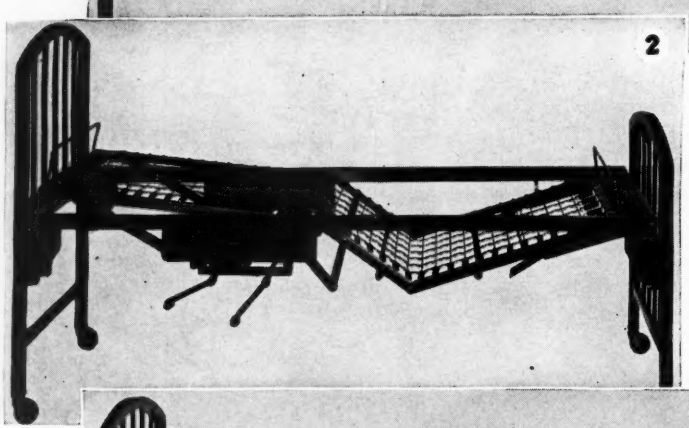

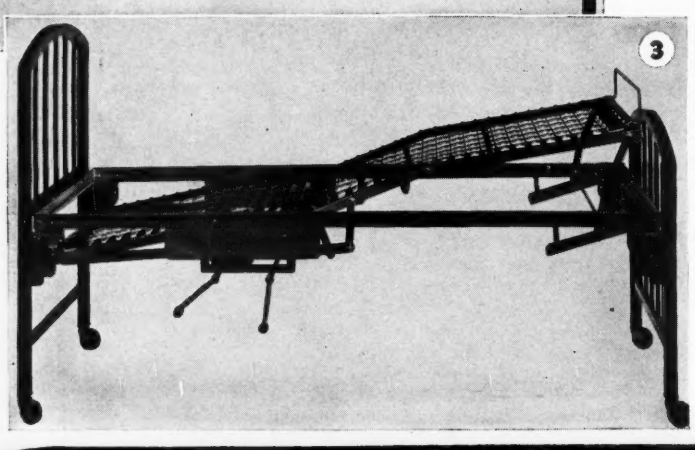

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VOL. 50—NO. 2 AUGUST, 1940

HOSPITAL MANAGEMENT is published on the tenth of each month at 100 East Ohio Street, Chicago, Illinois, by Hospital Management, Inc. Telephone: Delaware 1337. New York Office: 330 West 42nd Street. Telephone BRyant 9-6432. Southern Representative: B. Frank Cook, Walton Building, Atlanta, Ga., Member of the Audit Bureau of Circulations and the Associated Business Papers, Inc. Subscription, $2.00 a year. Single copies, 20 cents in U. S.; Canada, $2.00 a year; foreign, $2.50 a year. Entered as second class matter May 14, 1917, at the post office, Chicago, Illinois, under the Act of March 3, 1879.

"TO TALK OF MANY THINGS..."

I SPENT A VERY ENJOYABLE day this month with Robert Neff at the University of Iowa Hospital. Of course I chose the most trying weather we have had this year to make the trip. The temperature was around 100 most of the time, but, in spite of the weather, it was one of those inspiring contacts which we all need from time to time.

The hospital itself is worth seeing. It is well planned and pleasing in appearance. Most impressive, however, is the systematization that one sees everywhere. In an institution of this size the administrator cannot personally supervise everything, but Mr. Neff has devised a system of reports which keeps him in close touch with every department at all times. Yet there is no undue formality or sense of strangeness. He appears to know everyone he contacts and is greeted with friendliness at every turn. This is the spirit that makes a hospital successful.

I was most impressed with the ambulance system by which the services of the hospital are made available for residents in every part of the state. This is necessary because it is a state hospital, supported by tax funds derived from every county through the central government. Each county is assigned its quota of patients and is kept constantly aware of the status of its quota. Patients are properly referred by the county authority and are admitted as room is available. The ambulances attend to transportation. There are over 20, and the fleet leaves the hospital every morning, half going out one day and usually returning the next. Patients who are ready for discharge are sent out in the ambulances and the driver is given a list of those he is to pick up on the return trip. By this means the ambulance rarely drives any distance without a load. All trips are planned from the traffic office and, insofar as possible, they are in straight lines.

The accounting of the entire traffic department is most detailed; yet, it does not involve any unnecessary work. Through the records that are kept the traffic reports show every item of expense and the accomplishment which results from the expenditure. I noted that the cost per patient mile was only slightly over one cent.

This ambulance service does not pretend to care for emergencies, but it does bring good hospital and medical care for ordinary illness within the reach of every resident of the state. Mr. Neff states that it does not interfere with the work of the voluntary hospitals of the state. On the contrary, he believes that since it has definitely placed the responsibility for the care of the indigent on the governmental authority where it belongs, it enables the voluntary hospitals to collect fees from these governmental agencies which would not be collectible without a fixing of responsibility.

◆ ◆

WITH THE DEVELOPMENT OF the European war situation the people of the United States are becoming increasingly aware of the fact that we are certain to be affected in one way or another, and many are thinking in terms of their ability to render service in the most effective manner. As a result, we have received many requests from those who want to get into one branch or another of the service but do not know how to go about it.

With regard to medical service, the American Medical Association has officially undertaken to classify the physicians of the United States and is actively engaged in this work. All that any physician has to do is to answer the questionnaire which has been sent out, or if it has not been received he can secure one from his local medical society. By this classification it will be possible to determine what physicians can be made available for each type of service and which can be called without disrupting local organization.

Possibly other services concerned in the care of the sick may be also organizing but if so I am not aware of the fact. For nurses and others, I would suggest writing direct to the War Department at Washington.

◆ ◆

RECENTLY THE POLICE AND firemen of Chicago held their annual "thrill show" at Soldiers' Field and it was good. Among the demonstrations which particularly interested me was that showing first aid in emergencies. It was very complete and was well staged. One very important feature which must have impressed the thousands of spectators was the demonstration of first aid and preparation for moving the patient before any actual moving was undertaken. It was a splendid lesson teaching the doctrine of "splint them as they lie."

Right in front of where I was sitting, first aid treatment was given to a burn case and a fracture. The burn was sprayed with tannic acid and a loose but secure dressing was applied at once. The fracture was immobilized in a Thomas splint. In neither case was the patient moved about unnecessarily. The work was well done. Others may have been equally good, but were too far away for me to see clearly.

Then came the ridiculous and only inefficient part of the entire demonstration. There wasn't a single ambulance available to take the patient away. Stretchers were loaded in "Black Marias," salvage cars, squad cars, and other types of cars —but none in ambulances. The reason why more than 90 per cent of accidents occuring in the city are bundled into private cars was quite apparent.

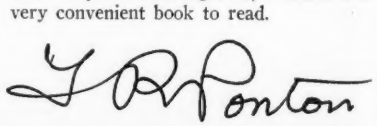
Is it not remarkable that Chicago, the second largest city in the United States, has not one emergency ambulance?

◆ ◆

PRACTICALLY EVERY HOSPITAL today has a patients' library. Some of these are affiliated with a public library; others are supported and operated by one or another of the organizations which cooperate with the hospital; a few are maintained by the hospital itself.

A problem in all those not associated with public libraries is the cost of purchasing books, and very often the books available are those discarded from someone's private library. In many cases they are soiled and dog-eared and their safety, from the sanitary point of view, is a matter of grave doubt. The cost of standard publications makes large purchases impossible and the hospital library is therefore obliged to take what it can get.

Recently a new idea has been launched which promises to solve this problem. A publishing firm has started to produce standard books in compact and usable form to sell for 25c a copy. Not very long ago I read the life of Benjamin Franklin in one of these editions. It was a handy book that I could read in bed or anywhere else. Although I consider it sacrilege to mistreat a good book, I tried doubling it back like an ordinary magazine and found that this maltreatment did not spoil the binding. The type was clear and easily read. Altogether, I found it a very convenient book to read.



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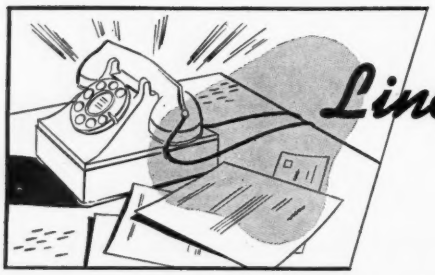

Lines and Letters

The Consulting Staff

To the Editor: *Our staff recently took action on allowing staff members after 15 years to be promoted to the Consulting Staff. For several years we have had a rule that every member at the age of 65 is promoted to the Consulting Staff, but this new ruling adds to the promoting scheme which will make it easier to get the younger men a place on the Active Staff.*

I thought you might be interested in it. I quote from the Minutes of the Staff:

"It is proposed that section 7 be amended to read: 'Members of the Active Staff at the age of 65 will automatically be recommended to the directors for election and elevation to membership on the Consulting Staff. Any member of the Active Staff who has served continuously for a period of 15 years may request in writing membership on the Consulting Staff. Such request will be voted on by the Active Staff, and the result of the ballot will determine the recommendation made to the directors. Members of the Consulting Staff can be removed for cause by the directors only, and shall have the same privilege of voting, serving on committees, and holding office as members of the Active Staff. Members of the Consulting Staff shall be notified of and privileged to vote in any meeting of the section to which he belonged before promotion to the Consulting Staff. The Consulting Staff will be available at all times for such consultation as to hospital policy, or medical service, as the Board of Directors, or Active Staff may desire.' The remainder of the section with reference to the Associate Staff and Courtesy Staff will remain the same."

Robert Jolly,
Superintendent.

Memorial Hospital
Houston, Tex.

There are several provisions in this amendment which I think will not work out to the best interests of the hospital and its patients.

First is the provision for automatically transferring members of the active staff to the consulting at the age of 65. Any hard and fast rule like this may work a hardship on the staff members and may be to the disadvantage of the patient. A man at this age may be perfectly competent and able to carry on active duties. On the other hand, he may be in the class who should be retired. But under this regulation he is certified as a physician who is competent to act as a consultant, regardless of his efficiency.

The second point does not contain the same serious objection. After 15 years of continuous service on the active staff a member may, at his own request, be transferred to the consulting staff and so be given recognition of service. He may not, however, be competent to act as a consultant, and if the request is refused on this ground he is given cause for offense.

I do not like the provision giving members of the consulting staff the same privileges as those who are active. The fact that they have been retired, because of age or long service, shows that they are not so actively interested in the hospital as formerly. The result is apt to be a group of officers and committee members who will show a lack of interest.

I prefer the organization which Dr. MacEachern advocates. The older men who have partially or wholly retired are given recognition by being placed on the honorary staff. Those who can qualify as consultants are carefully selected, regardless of their age or service time. It is competence and specialization which counts. Those who do not wish to remain on the active staff, who cannot qualify as consultants and who are still in active practice, revert to the courtesy staff.

By this means all are honored. It is true that it is still difficult to make room for the younger men who wish to advance, but this can be provided if appointments to the active staff are made on records of competence as shown by a system of professional accounting. Under this system the members of the staff are appointed to the various divisions on a basis of proven competence. If the older man has not kept up to date he is replaced by a younger man who has shown competence. If the younger men do not excel they are not promoted, and why should they be?

Visiting Patients

To the Editor: *My assistant and I have disagreed on the practice of daily visits to all patients who are not critically ill. She is of the opinion that these visits tend to create a more friendly feeling between patient and hospital management and also give an opportunity for discussing financial arrangements from time to time.*

I contend that visiting by the superintendent or his representative only gives the patient more opportunity to make complaints of a minor nature and to criticize the nursing care, food, etc.

Is it the general practice to visit patients in small hospitals? We have 100 beds with a daily average of 45 to 50 patients.

C. S. Myers,
Superintendent.

Morrell Memorial Hospital
Lakeland, Fla.

Our personal experience is that an informal visit with the patient is one of the best means of securing good will. By this we do not mean formal rounds which are a nuisance to the patient and certainly bore the superintendent to distraction. A few minutes of friendly chatting may be very illuminating even if hospitals and illness are never mentioned. One gets an insight into character and reactions which is invaluable in satisfying the patient. Often he will offer some suggestion which will be of material assistance in administration.

We do not believe that the subject of paying the account should be mentioned in such social visits. Usually it is better to have some person other than the superintendent attend to this matter, but if it becomes necessary for the superintendent to enter into such questions it would be advisable to make a visit specifically for this purpose.

Large Hospital Sometimes Advantageous

To the Editor: *May I say that I agree in part, but only in part, with the timely remarks in your February issue about the merits of large and small hospitals. I am ready to support your view about the disadvantages of a hospital swollen to such a size that the responsible administrator of the institution cannot possibly know the personnel with whom he is dealing. On the other hand, I cannot endorse your quoted statement that "the ideal hospital from the administrative point of view is one of 250 to 300 beds."*

In the practice of modern medicine numerous specialties must be recognized, and the ideal hospital should provide for each specialty a sufficient volume of work to make possible the use, on an economical basis, of the most advanced modern equipment, however costly. At the head of each clinical service should be a qualified specialist, who must have at his disposal clinical and laboratory facilities of a kind that will enable him to maintain a teaching and, in selected instances, even a research program. For statistical studies, for controlled investigations and experiments

(Continued on page 34)

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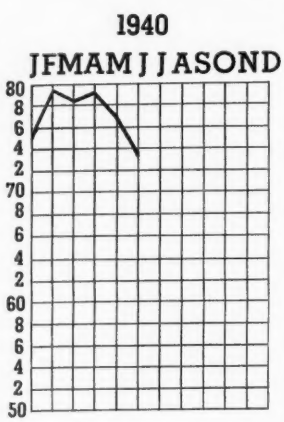
How's Business?

Occupancy Drops in Most Sections of the Country

Hospitals in most sections of the United States reported lower occupancy in June, with the exception of those in the South Atlantic and the West South Central states which showed increases over May. Occupancy in both of these sections, however, was considerably under the national average in May.

The June occupancy figure for the country as a whole was *73.37* per cent. still continuing at a higher level than the occupancy in the same month last year, but 3.64 per cent below that recorded in May, 1940. Occupancy in New England hospitals remains at a high level; in June, average occupancy was 83.66 per cent as against 83.90 per cent the preceding month.

Total daily average patient census for the 100 hospitals reporting again showed a decrease from the month before—13,542 in June and 14,454 in May. Total receipts and expenditures also dropped. June receipts amounted to $2,419,853.84 compared with $2,663,677.77 in May; June expenditures were $2,624,590.77 as compared with $2,744,331.94 the previous month.



Average Occupancy on 100 Per Cent Basis

November, 1936	72.50
December, 1936	68.80
January, 1937	70.90
February, 1937	73.05
March, 1937	69.98
April, 1937	73.00
May, 1937	72.48
June, 1937	72.35
July, 1937	68.58
August, 1937	68.05
September, 1937	63.25
October, 1937	63.09
November, 1937	69.80
December, 1937	63.00
January, 1938	71.50
February, 1938	74.80
March, 1938	76.12
April, 1938	71.90
May, 1938	69.86
June, 1938	70.70
July, 1938	67.68
August, 1938	65.80
September, 1938	65.17
October, 1938	69.45
November, 1938	69.20
December, 1938	67.95
January, 1939	74.57
February, 1939	76.47
March, 1939	75.84
April, 1939	73.93
May, 1939	72.56
June, 1939	72.33
July, 1939	74.05
August, 1939	70.87
September, 1939	68.10
October, 1939	72.67
November, 1939	72.33
December, 1939	67.24
January, 1940	75.66
February, 1940	79.36
March, 1940	78.50
April, 1940	79.10
May, 1940	77.01
June, 1940	73.37

Total Daily Average Patient Census

November, 1936	10,204
December, 1936	9,687
January, 1937	10,771
February, 1937	10,941
March, 1937	10,990
April, 1937	11,703
May, 1937	11,002
June, 1937	11,403
July, 1937	10,914
August, 1937	10,712
September, 1937	9,805
October, 1937	10,004
November, 1937	11,590
December, 1937	8,903
January, 1938	14,177
February, 1938	14,944
March, 1938	17,579
April, 1938	14,465
May, 1938	14,194
June, 1938	13,939
July, 1938	13,976
August, 1938	13,735
September, 1938	13,138
October, 1938	14,103
November, 1938	13,685
December, 1938	12,877
January, 1939	15,133
February, 1939	14,886
March, 1939	14,585
April, 1939	14,293
May, 1939	14,702
June, 1939	14,266
July, 1939	14,952
August, 1939	13,419
September, 1939	13,827
October, 1939	14,536
November, 1939	14,908
December, 1939	13,476
January, 1940	15,326
February, 1940	15,483
March, 1940	15,658
April, 1940	15,703
May, 1940	14,454
June, 1940	13,542

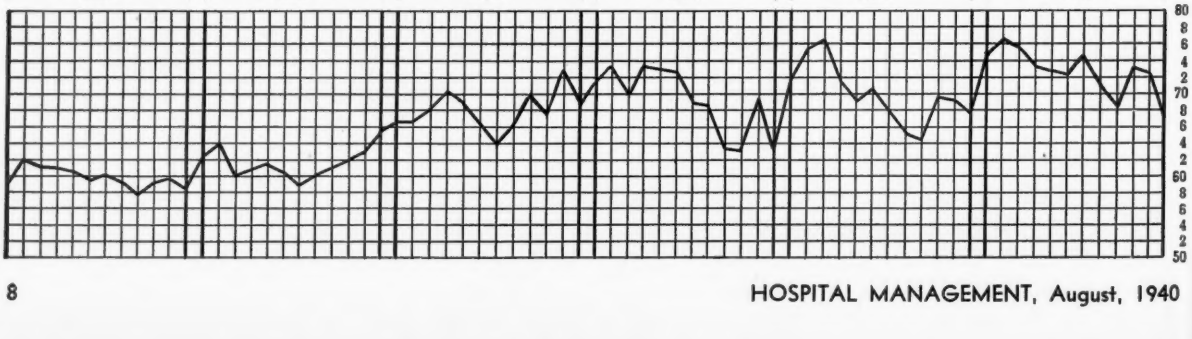
Receipts from Patients

November, 1936	1,465,067.52
December, 1936	1,272,765.60
January, 1937	1,539,576.00
February, 1937	1,516,917.00
March, 1937	1,672,002.72
April, 1937	1,694,262.24
May, 1937	1,776,046.32
June, 1937	1,646,881.92
July, 1937	1,728,112.32
August, 1937	1,773,724.32
September, 1937	1,496,919.68
October, 1937	1,679,252.40
November, 1937	1,624,680.72
December, 1937	1,491,132.24
January, 1938	2,285,605.34
February, 1938	2,202,334.78
March, 1938	2,611,169.58
April, 1938	2,312,768.26
May, 1938	2,481,591.59
June, 1938	2,304,268.32
July, 1938	2,529,686.40
August, 1938	2,337,295.65
September, 1938	2,126,627.84
October, 1938	2,433,872.54
November, 1938	2,277,880.76
December, 1938	2,162,011.03
January, 1939	2,457,434.28
February, 1939	2,282,062.33
March, 1939	2,524,429.49
April, 1939	2,463,491.55
May, 1939	2,669,878.14
June, 1939	2,936,732.81
July, 1939	2,558,450.00
August, 1939	2,395,063.49
September, 1939	2,355,545.45
October, 1939	2,560,529.68
November, 1939	2,536,426.56
December, 1939	2,353,627.42
January, 1940	2,722,150.88
February, 1940	2,504,661.32
March, 1940	2,849,669.35
April, 1940	2,760,072.58
May, 1940	2,663,677.77
June, 1940	2,419,853.84

Operating Expenditures

November, 1936	1,817,101.44
December, 1936	1,568,264.40
January, 1937	1,864,748.16
February, 1937	1,890,667.44
March, 1937	1,969,652.16
April, 1937	2,180,839.60
May, 1937	1,988,845.92
June, 1937	1,990,221.12
July, 1937	1,933,971.84
August, 1937	2,066,890.32
September, 1937	2,058,107.72
October, 1937	2,140,030.08
November, 1937	1,958,306.24
December, 1937	1,891,580.40
January, 1938	2,694,605.32
February, 1938	2,618,517.39
March, 1938	2,922,850.00
April, 1938	2,735,879.56
May, 1938	2,777,780.72
June, 1938	2,704,438.11
July, 1938	2,915,889.82
August, 1938	2,973,112.41
September, 1938	2,546,495.02
October, 1938	3,002,474.11
November, 1938	2,750,654.42
December, 1938	2,476,764.23
January, 1939	2,833,180.02
February, 1939	2,563,253.61
March, 1939	2,717,146.15
April, 1939	2,646,285.92
May, 1939	2,831,340.72
June, 1939	3,225,065.63
July, 1939	2,878,193.93
August, 1939	2,614,095.23
September, 1939	2,803,382.08
October, 1939	2,852,221.88
November, 1939	2,983,409.38
December, 1939	2,828,533.87
January, 1940	2,978,559.65
February, 1940	2,751,486.46
March, 1940	3,020,548.38
April, 1940	2,904,598.38
May, 1940	2,744,331.94
June, 1940	2,624,590.77

Average Occupancy of Hospitals — 1934 to 1939



Hospital Management

AUGUST, 1940

Hospital and Health Needs Receive Attention in Preparedness Program

By KARL W. MASONER
Washington Bureau, Hospital Management

The National Defense Program is taking rapid and definite steps in the field of health and hospital problems.

Official Washington quarters, including the National Defense Advisory Commission, the Army, the Navy and the United States Public Health Service, have plans on foot. In addition they are receiving much valuable cooperation from civilian medical and hospital organizations.

Parran on Defense Commission

Soon after last month's issue of HOSPITAL MANAGEMENT came off the presses, Miss Harriet Elliott, member of the National Defense Advisory Commission in charge of consumer protection, appointed Dr. Thomas Parran, Surgeon General of the United States Public Health Service, to her staff. Dr. Parran's task, in general, will be to direct civilian activities involving public health and medical problems connected with the defense program.

The set-up under Miss Elliott's office follows closely the general plan advocated by Dr. Parran himself. However, instead of giving a separate place to health and medical interests, the plan calls for coordinating them with other public welfare work of the federal government.

Problems of child welfare, social security and general welfare, and problems of nutrition will all come under the jurisdiction of a four-person coordinating committee under Miss Elliott's division. In addition to Surgeon General Parran there will be Miss Katherine Lenroot, chief of the Children's Bureau of the Department of Labor to direct activities relating to children and child welfare; Arthur J. Altmeyer, chairman of the Social Security Board, in charge of social security, and Dr. M. L. Wilson, director of the Extension Service of the Department of Agriculture, to direct activities concerned with nutrition.

Though little can yet be said of the actual work and plans of this group, there are some indications of the general scope of the task facing it. The problems are numerous and most of them obvious. The solutions are not so obvious.

Probably the most important of the problems will be that of maintaining an adequate balance between civilian and military medical needs. Other important problems include the furnishing of hospital and medical facilities to communities affected most by the preparedness program. Another highly important aspect of the total picture concerns the conduct of research. New chemical processes in industry and new industrial production methods may easily bring new health problems for doctors to deal with. All of this work will be coordinated through Miss Elliott's office in the National Defense Advisory Commission.

Of more pressing immediacy are the tasks facing the medical sections of the Army and the Navy and the Veterans' Administration. The Army and Navy expect greatly increased enlistments. The Veterans' Administration, in case of actual war, will have the task of caring for all the men disabled through military service, a tremendous task and one not usually given consideration by the general public.

With passage of the Burke-Wadsworth Compulsory Military Training Bill being freely predicted as imminent, the War Department is looking to its medical needs. The plans of the War Department to put over a million men under training by April, 1941, calls for some serious thought. A million men under training will require a large medical staff. Though this is not yet war, the demands on the medical world will be at least an approximation of wartime demands. Where are those doctors and medical assistants coming from? If there is going to be some plan of selective service for medical personnel, it must start in this training program.

Army's Medical Needs

So long as the Army remains on a voluntary enlistment plan its medical personnel will be sufficient. Conscription or the military training plan would be a different thing.

For a complete mobilization the Army estimates that it might have as many as four million men mobilized and under arms. On that basis some 28,000 medical officers would be required. The Army Medical Reserve now has some 15,300 members. Discounting those who may be physically unacceptable, this would leave the Army with approximately half its medical needs yet to be procured. The problem now is how to get those men on call so that they will be available if and when needed.

The first step in that procurement plan is already being taken by the

Plans for the coordination of the nation's hospital, medical and health services—to care adequately for both civilian and military needs—are rapidly being made as part of our national preparedness program. Although the program, as it affects the hospital and medical professions, is still in its preliminary stages, the steps already taken indicate the tremendous task we are facing.

Surgeon General of the Army. His staff is now working on a complete classification of all of its medical needs. When that is completed, the Army will then know the number of doctors, nurses, assistants, specialists, etc., that it needs. At the same time an analysis is being made of the composition of its Reserve Medical Corps on the same basis. The Surgeon General may then look to his list of needs and turn to his list of reserves to fill those needs.

The purpose of the whole organization plan is to make rational assignments on the basis of function. Much criticism was heard during the World War of the "round peg in the square hole." The Army believes that these and other steps will avoid that in the future.

The work of the American Medical Association in conducting a registration and classification of medical personnel is expected to be of great assistance both to the Army and to the Navy. For example, if the Army finds that it needs a certain number of surgeons over and above its reserve supply, it hopes to be able to turn to the A.M.A. for assistance. The A.M.A. classification will show what men are available, who are willing to volunteer for service, what their qualifications are, and whether or not they can be spared from their positions.

The question of training replacements and additional medical staff remains yet one of the big unsolved problems. It falls within the province of Dr. Parran under the National Defense Advisory Commission rather than that of the Army or Navy and apparently has not been studied out thoroughly yet.

Navy's Medical Needs

Probable Navy demands for medical and hospital personnel are small compared to those of the Army. The present man-power strength of the Navy is only about 140,000, and even with a stretch of the imagination can hardly be expected to go over 500,000. Under the law the Navy is authorized medical officers up to .65 per cent of the total strength of the Navy and Marine Corps. That would mean 3,250 doctors at the most and probably much less.

It is estimated that the requirements for the Naval Nurse Corps, if designated at 3 per cent of the enlisted strength, would meet the needs of the naval service. Hospital corpsmen are limited to 3.5 per cent or 17,500 on the basis of the 500,000 total estimated men. Dental officers cannot exceed .2 per cent or 1,000 on the same basis. In considering all these figures, however, it must be borne in mind that a Navy personnel of 500,000 is a purely hypothetical figure. It simply represents a guess as to what the Navy's strength might go in case of war.

With those figures in mind it can readily be seen that the demands of the Navy will be relatively small. When it is considered in addition that the Navy already has a medical reserve of 1,496 medical officers, 414 dental officers and 573 nurses, the Navy medical situation is seen to be one not destined to cause great concern. Included in the reserves are 110 medical specialist units ready for action in event of mobilization. These units are made up chiefly of members of staffs of medical schools and teaching hospitals. In order to avoid depletion of the teaching staffs of medical schools, provision has been made whereby alternates will be utilized to replace the principals of medical specialist units taken from important positions in hospitals and medical schools.

Psychiatry Increasingly Important

One other important medical group may be expected to take an important place in both Army and Navy medical work which was not in evidence during the World War. That group is made up of the psychiatrists and is becoming increasingly important. The chief task of this portion of Army and Navy medical personnel will be to weed out borderline mental cases and borderline psycho-neurotics, those who are likely to break down under strain and pressure.

Since these cases cannot be detected at first examination, much of the work of the Army and Navy psychiatrists will be carried on in training camps. There they will have opportunity to see men under pressure, and judge whether they are fit for service. In this way the Army and Navy may avoid much trouble and expense on the one hand and many personal tragedies may be avoided on the part of the men who are found to be unfit by some reason of mental or nervous make-up.

One final step has been taken to coordinate the medical programs of the Army, the Navy and the Veterans' Administration. A special committee with representatives from these three agencies has been set up to study the problem, to formulate policy and to collect data. In the course of its work this group will make a complete survey of present available hospital and medical facilities and make estimates of probable needs, the best locations for new facilities, etc.

As with so much of the Defense Program this group is still working in the organizational and formative stage. It has not made any report as yet and it is not certain that the report will be public when it is made. The chief purpose of the committee, however, is to avoid the confusion that existed at the beginning of the last war—to coordinate the hospital facilities of the Army, Navy and Veterans' Administration so as to cause as little disturbance to civilian hospital work as possible.

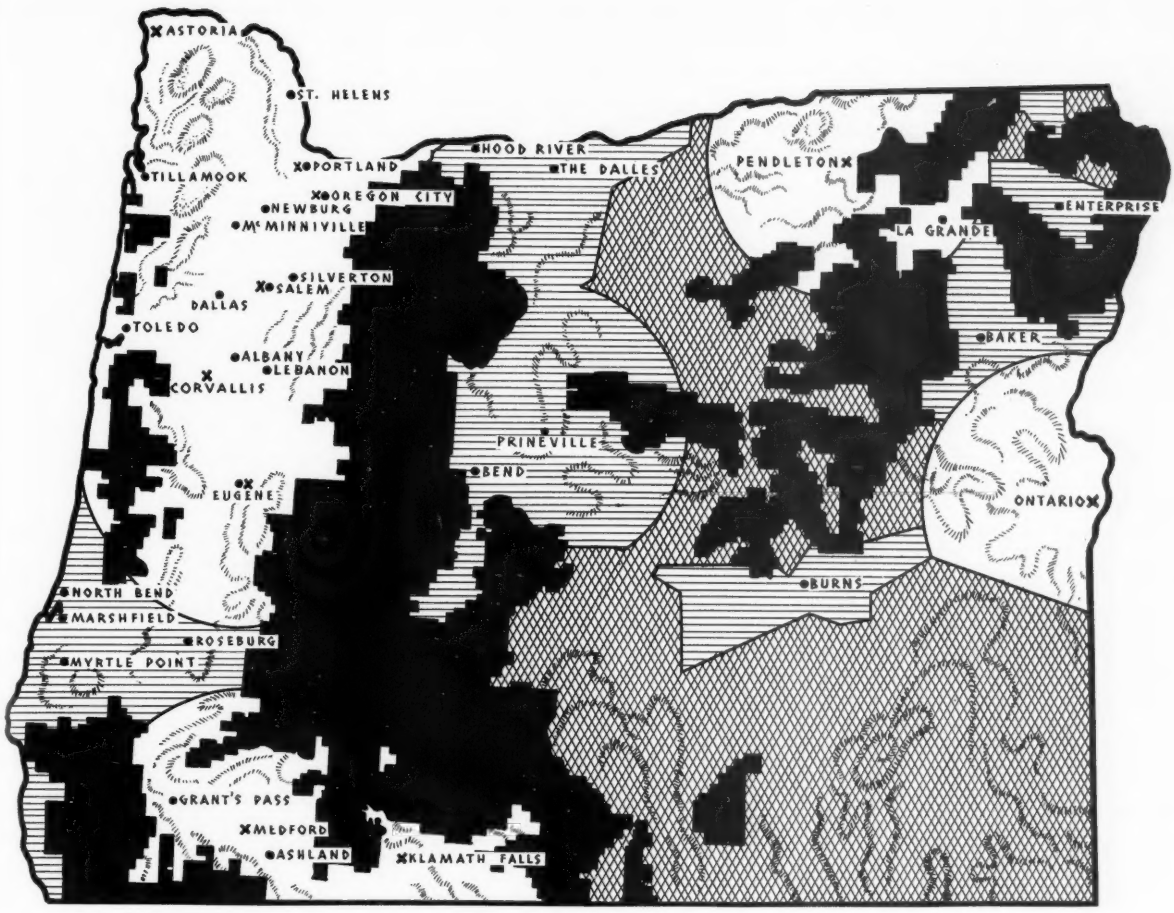
Though these facts are only a partial picture of the defense preparedness program as it affects the medical and hospital profession, they do give an indication of the tremendous task facing the nation. As the program gets further under way definite steps and plans will become more apparent, but until that time reports must remain in somewhat generalized terms.

Guest Speakers Selected For Southern Institute

The second Southern Institute for Hospital Administrators will be held Oct. 21 through Nov. 1 at Charity Hospital, New Orleans. The Institute will be sponsored by the American College of Hospital Administrators in cooperation with the Southeastern Hospital Conference, the Carolinas-Virginias Hospital Conferences, Tulane University and Louisiana State University.

Under the direction of Dr. A. J. Hockett, superintendent of Touro Infirmary, New Orleans, a program of round table conferences, panel discussions, seminars and demonstrations has been arranged. Guest speakers selected include:

Dr. Malcolm T. MacEachern, associate director of the American College of Surgeons; Dr. Robin C. Buerki, chairman of the A.H.A. Commission on Graduate Medical Education; James A. Hamilton, president of the American College of Hospital Administrators; Arden E. Hardgrove, superintendent, Norton Memorial Infirmary, Louisville, Ky.; Dr. Leon S. Lippincott, administrator, Vicksburg Sanitarium, Vicksburg, Tenn.; Dr. A. M. McCarthy superintendent, George C. Hixon Memorial Hospital, Electric Mills, Miss.; Dr. Max M. Lapham, dean, School of Medicine, Tulane University, New Orleans; Dr. B. I. Burns, dean, School of Medicine, Louisiana State University, New Orleans; Helen Branham, R.N., director, Community Hospital, Tupelo, Miss.; and Regina Kaplan, R.N., director, Leo N. Levi Memorial Hospital, Hot Springs, Ark.



"Service distance" is a distance not greater than 50 miles, the variation depending on accessibility.

Oregon's Hospital Service Analyzed

This is the second of a series of articles dealing with the analysis of hospital service in the United States. Although every state has been analyzed in detail, HOSPITAL MANAGEMENT *is presenting the analysis of only one, Oregon, which is used as an example because most of the points brought out in the various states are illustrated by conditions in this state.*

By T. R. PONTON, M.D.
Editor, HOSPITAL MANAGEMENT

In making the analysis of hospital service each state was considered separately. First all available data was tabulated, then maps were drawn for each state showing reservations, mountains, roads and other factors which influenced accessibility and possible utilization of hospitals. Cities having hospitals of the two different classes were indicated on the maps, and, finally, areas within service distance of these cities were carefully scaled. The maximum service distance was taken as 50 miles, but when the nature of the country or the lack of good roads made transportation difficult this distance was reduced as circumstances appeared to indicate.

From the basic data and the visualization of conditions thus secured, it was possible to arrive at conclusions as to present hospital service and probable indications for future planning. These conclusions are as accurate as can be secured without detailed local study.

Since it is impossible at the present time to publish the analysis for all states, Oregon is presented as an example. This state is used because it illustrates most of the points brought out in the analysis of other states.

Oregon's population, as shown in the 1930 census, was as follows:

Urban	489,746	51.3%
Rural	464,040	48.7%
Total	953,786	100.0%

The total area of the state is 95,607

square miles, giving it a population ratio of 10 per square mile.

Oregon is very mountainous in many sections, but there are large fertile valleys with a great concentration of population. Through, hard roads connect these areas with each other, and in each there are a sufficient number of roads to make all parts of the area accessible.

One large chain of national reservations runs through the state from north to south in its eastern third, and there are also national reservations in other parts. In the aggregate, these occupy approximately one-third of the state's area.

Service by Approved Hospitals

There are four areas in the state which are within service distance of approved hospitals.

The largest of these runs down the coast from the northwest corner. It is 200 miles long and averages 80 miles in width. The population ratio is between 2 and 6 in one small section but in the major part it is as high as 45 per square mile.*

Near the northeast corner of the state is another large area occupying two-thirds of a 50-mile circle. It is broken by a large national reservation but the population ratio of the counties in which it is located is between 6 and 18 per square mile.

A third area to the southeast of this extends for 80 miles along the eastern boundary and 50 miles into the state. The population ratio in the southern half is less than 2 per square mile and in the northern it is between 2 and 6.

A fourth area is found in the southwestern part of the state near the western boundary. It extends for 130 miles along the southern boundary and 75 miles northwest into the state. It is broken by national reservations but the average width is 40 miles. The population ratio of the western two-thirds is between 6 and 18 per square mile and in the eastern one-third between 2 and 6 per square mile.

There are 18 approved hospitals in Oregon, having an aggregate capacity of 2,446 beds, a ratio of 2.5 per thousand of the entire population. In 1939, these hospitals admitted 62,761 patients, gave 660,285 days' treatment, and showed an average occupancy of 73.9 per cent. In one city the occupancy exceeded 90 per cent.

Service by Non-Approved Hospitals

There are six areas served only by non-approved hospitals. One is so small as to be negligible.

One area is near the northwestern corner of the state. It averages 30 by 30 miles and has a population ratio between 2 and 6 per square mile.

South of this is a star shaped area which extends for 50 miles in three directions. It has a population ratio between 2 and 6 per square mile.

Still further south is a long area which extends 50 miles east and west from Burns. Its average width is 20 miles and the population ratio is less than 2 per square mile.

In the north central part of the state there are two areas which are continuous. The northern of these is 50 miles long and averages 30 miles in width. The population ratio is between 2 and 6 per square mile. The southern occupies one-half of a 50-mile circle and a ten mile branch runs south. The population ratio is less than 2 per square mile.

On the western boundary, extending 120 miles from its southern end, is an area which is only 5 miles wide in its southern half but averages 65 in the northern. The population ratio is between 2 and 6 per square mile.

There are 28 non-approved hospitals in the state, of which nine are privately owned. They have a capacity of 1,149 beds, and in 1939 they admitted 23,507 patients, gave 206,955 days' treatment, and showed an average occupancy of 49.3 per cent.

In the towns in which there are non-approved hospitals, exclusive of those in which approved institutions are also located, there are 129 general practitioners and 48 specialists.

Areas Beyond Service Distance of Any Hospital

In the southeastern part of the state there is a large area which extends for 100 miles along the eastern boundary and for 175 miles along the southern. It is quite broken along its northern boundary but averages 115 miles in width. The population ratio is less than 2 per square mile.

In the north center there is a second area which is 85 miles long and averages 40 miles in width. In the northern half the population ratio is between 2 and 6 per square mile while in the southern half it is less than 2.

Connecting these there is a narrow area 60 miles long and averaging ten miles in width in which the population ratio is less than 2 per square mile.

In the eastern part of the state there are six small areas beyond service distance of any hospital, but they are so small as to be negligible. The population ratio is less than 2 per square mile in three of them and between 2 and 6 in the other three.

In the towns in these areas there are 18 general pratitioners and three specialists.

Hospital Service in the State as a Whole

The hospitals of Oregon have an aggregate capacity of 3,595 beds, a ratio of 3.7 per thousand of population.

If the beds in the approved hospitals could have been utilized to the safe capacity of 90 per cent they could have accommodated 13,673 additional patients, 9,834 less than all those admitted to non-approved hospitals.

The approved hospitals of the state have sufficient capacity to meet the needs of areas within service distance. They also have sufficient capacity to care for all cases that may be referred, but travel distance is often very great. It would appear, that no better arrangement can be made for the complex cases that need to be referred unless it is possible for some of the non-approved hospitals to improve to the extent that they can meet recognized standards.

A large number of the non-approved hospitals are, therefore, necessary to good medical and hospital care, and there is a very strong indication for them to make the changes necessary to allow them to meet recognized standards.

There are two towns in areas beyond service distance of any hospital in which more than two physicians are located and it appears possible that a small hospital or a first aid station may be a practical possibility in one or both of these. Condon, in the north central area, is in a region having a population ratio of 2 to 6 per square mile, and three general practitioners have located here. Lakeview, in the south, has a population of 1,799 and has three general practitioners and three specialists.

Because of the lack of roads ambulance service would not be of any value except possibly in the north central area.

Summary of Conclusions

1. The approved hospitals do not have sufficient capacity to meet all needs and also they are too distant from many parts of the state to be regularly used. They are even so distant from some parts as to handi-

*In showing population distribution the Bureau of Census classifies counties as follows: Less than 2 per square mile; between 2 and 6; between 6 and 18; between 18 and 45; between 45 and 90; over 90. Usually, unless there is concentration of population in a small section or some other indication, any area having a population less than 6 per square mile cannot support even the minimum hospital while one in which the population is more than 6 per square mile can, as a rule, support a reasonably good institution.

cap their use for the more complex cases. In one city the occupancy exceeded the safe margin of 90 per cent and it is probable that hospital accommodation should be increased.

2. Many of the non-approved hospitals are a necessity, and because of the distance from some of the approved institutions there is a very great indication for improvement of their facilities.

3. There are two localities in which first aid stations or small hospitals may be indicated.

4. Ambulance service may be of value in one area that is at present without any service.

Points Brought Out in the Analysis

Insofar as the state of Oregon is concerned, several points are clearly brought out.

1. Of the seven approved general hospitals in the city of Portland, only two show a low occupancy. The other five exceeded the reasonable occupancy and two were used almost to full capacity. The average occupancy for all seven was 90.1 per cent and experience has shown that such overcrowding is unsafe. There is only one small non-approved hospital which shows an occupancy of 42.1 per cent, but it is too small to relieve the situation even though it were built up to meet recognized standards. The fact that Portland is the chief city of the state would appear to necessitate that its hospital facilities be adequate. There appears, therefore, to be a strong indication for increasing the capacity of one or several of the approved hospitals.

2. Some parts of the state which are served exclusively by non-approved hospitals are too distant from centers having approved institutions to allow easy reference of the more complex cases which cannot be treated properly in the less complete institution. Yet, it is safer for these patients to travel inconvenient distances and receive adequate care than for them to receive inadequate treatment in the less complete institution. Railway transportation makes this possible.

3. Because of this situation, there is a very strong indication for improving some, at least, of the non-approved institutions in order that they may be able to give a more complete service.

4. The effect of population concentration is shown in some of the cities. Several of these are located in areas in which the county ratio is less than 6 per square mile, a ratio which ordinarily would contraindicate the establishment of any kind of hospital. But

(Continued on page 32)

APPROVED GENERAL HOSPITALS - 1939 Lists.

CITY	Number	Control			Bed Capacity	Average Census	Percent Occupancy	Total Days	Admissions	General Practitioners	Specialists
		Government	Voluntary	Private							
Astoria	2		2		206	86	41.7	31,390	3,570		
Corvallis	1		1		38	17	44.7	6,205	677		
Eugene	1		1		115	74	64.3	27,010	3,551		
Klamath Falls	2		2		94	75	79.7	27,375	3,350		
Medford	1		1		75	50	66.6	18,250	1,688		
Ontario	1		1		35	26	74.2	9,490	916		
Oregon City	1		1		53	41	77.3	14,965	1,013		
Pendleton	1		1		70	55	78.5	20,075	1,841		
Portland	7	1	6		1,688	1,342	90.1	489,830	44,253		
Salem	1		1		72	43	59.7	15,695	1,902		
Totals	18	1	17		2,446	1,809	73.9	660,285	62,761		

NON-APPROVED GENERAL HOSPITALS

CITY	Number	Control			Bed Capacity	Average Census	Percent Occupancy	Total Days	Admissions	General Practitioners	Specialists
		Government	Voluntary	Private							
Albany	1		1		50	21	42.0	7,665	876	6	0
Ashland	1			1	21	6	28.5	2,190	587	8	1
Baker	1		1		80	50	62.5	18,250	2,200	11	4
Bend	1		1		45	29	64.4	10,585	1,377	6	5
Burns	1			1	18	8	22.2	2,920	449	6	0
Dallas	1		1		29	13	44.8	4,745	273	5	1
Enterprise	1		1		15	5	33.3	1,825	250	4	1
Eugene	1			1	70	41	58.5	14,965	1,836	Approved	
Grants Pass	1	1			50	25	50.0	9,125	983	6	4
Hood River	1		1		36	22	61.1	8,030	1,178	6	2
La Grande	1		1		55	27	49.1	9,855	800	5	7
Lebanon	1		1		26	15	57.6	5,475	584	3	0
*Marshfield	1		1		50					8	2
McMinnville	1		1		40	27	67.5	9,855	1,081	6	4
Myrtle Point	1			1	44	21	47.7	7,665	617	4	0
Newberg	1		1		20	7	35.0	2,555	476	4	1
North Bend	1		1		60	40	66.6	14,600	1,452	2	1
Oregon City	1			1	31	12	38.7	4,380	610	Approved	
Portland	1		1		57	24	42.1	8,760	511	Approved	
*Prineville	1			1	20					2	0
Roseberg	1		1		36	20	55.5	7,300	1,110	10	3
St. Helens	1		1		19	7	36.8	2,555	584	6	0
Salem	1		1		100	63	63.0	22,995	2,048	Approved	
Silverton	1		1		20	10	50.0	3,650	444	4	2
The Dalles	2		1	1	97	49	50.5	17,885	2,159	9	7
Tillamook	1			1	35	11	31.4	4,015	520	4	2
Toledo	1			1	25	14	56.0	5,110	502	4	1
Totals	28	1	18	9	1,149	567	49.3	206,955	23,507	129	48

AREAS BEYOND SERVICE DISTANCE OF ANY HOSPITAL

CITY	Number	Control			Bed Capacity	Average Census	Percent Occupancy	Total Days	Admissions	General Practitioners	Specialists
		Government	Voluntary	Private							
Canyon City										1	0
Condon										3	0
Fossil										2	0
John Day										2	0
Jordan Valley										1	0
Lakeview										3	3
Long Creek										1	0
Mitchell										1	0
Mount Vernon										1	0
Paisley										1	0
Prarie City										1	0
Silver Lake										1	0
Totals										18	3

14 Millions Is Duke's Contribution to Hospital Care in the Carolinas

A characteristic and wholly praiseworthy contribution of American philanthropy to the hospital field has been made by a group of generously endowed foundations, whose activities have for the most part been taken for granted, and knowledge of which has been assumed to exist much more widely than is actually the case. With the accompanying brief factual story of The Duke Endowment, HOSPITAL MANAGEMENT begins a series on the work of these great foundations.

Among the foundations set up to give aid to the voluntary hospitals in one form or another the Duke Endowment is notably interesting because of both the form and the extent of its assistance, as well as because of its work being confined to the Carolinas, where it happens to be badly needed. This sectional specialization may be considered as a kind of happy coincidence, since it resulted from the fact that North Carolina was the native state and the home of the founder, but there could hardly have been selected, after careful study, an area more specifically in need of assistance to the hospitals and to the medically indigent. The aid given thus looms large in the hospital picture in this area, and has produced during the 15-year period thus far covered a surprising improvement, which is still in progress and will undoubtedly continue.

Established in 1924

The Duke Endowment was established by James B. Duke in 1924, with a fund said to have been at the time in the neighborhood of forty million dollars, plus ten million more under his will, and with an additional amount from the residuary estate. To this great sum have been added, under the terms of the endowment, the year-by-year proceeds of 20 per cent of the income from the original amount, so that by now the total must be a fairly substantial figure. This process of growth of the principal is to continue until the additions themselves amount to $40,000,000, so that the intent of the founder was apparently a trust fund in the neighborhood of a hundred million dollars.

While the remainder of the annual income is all allocated to philanthropic purposes in North and South Carolina, including Duke University and the support of orphanages, hospitals benefit to a greater extent than any other single object of the endowment, the specific provisions of the trust for hospitals being as follows: Of the income not retained for addition to the principal sum, 32 per cent is for the benefit of Carolina hospitals; and 90 per cent of the income from two-thirds of the Duke residuary estate after $7,000,000 had been applied to the construction of Duke University also goes to the hospitals.

Aid to the hospitals and the public which they serve is afforded in two forms—aid in construction and aid in the form of a payment of not more than one dollar per patient day for free hospital care. The latter limitation is a part of the specific terms of the trust indenture, based on the fact that the cost of ward care in the Carolinas is usually not more than three dollars a day, and the view was indicated that other philanthropies and the communities themselves should bear their share of the load, to say nothing of tax sources of hospital revenue.

Aid in construction is given only as a contribution, never to the extent of the entire cost of the hospital, after careful investigation both of the needs of the community and its ability to support the institution after construction. The Duke contribution is practically never equal to as much as one-half of the total cost, local sources therefore being required, as an accurate index of willingness and ability to support the hospital, to raise more than half of the money needed for original construction and equipment.

Some figures recently made available covering the 15 years of the Endowment's activities in the hospital field in the Carolinas give striking proof of the extent to which it has performed the objects for which it was founded. During this period 158 hospitals have received payments for the care of patients, in-patients treated numbering 1,959,394 and out-patients 1,897,245, while the Endowment directly assisted 46 per cent of all in-patients, providing in this way 30 per cent of the cost of all free service in these hospitals. At the actual average cost of $38.42 per patient the amount paid to the hospitals for free service amounts to the full cost of the treatment of 273,653 patients, or, a total for the period of $10,513,742.95. Since the hospitals of the two states rendered in this period 10,524,582 days of free bed care, it will be noted that for a brief time the funds available were not sufficient to pay the limit of one dollar per day, although for much the greater part of the 15-year period the limit has been paid.

Over 3 Million for Construction

For hospital construction and equipment the amount invested has been $3,354,901.16, 69 hospitals having been built, at an average cost of $48,621. This low figure reflects the generally low cost of both land and building in the South, a compilation of total plant investment in hospitals in the Carolinas made by the Endowment showing as of the end of 1938 that the 8,373 beds in these hospitals represented an investment of $27,930,366, or an average of only about $3,335 per bed, which is undoubtedly considerably below the national average.

It may be said, on the other hand, that this situation has enabled the Endowment to spread its available funds around more effectively than would otherwise have been the case; and it reflects, of course, the fact that living costs are lower and that labor for construction as well as for other purposes can therefore be had at a lower cost per day than in the high-cost industrial sections of the North and the Middle West. This is in part due to one of the characteristic population factors in the Carolinas, the presence of a substantial number of Negroes. And this in its turn is an outstanding factor in the hospital problem in this area as elsewhere in the South, since typically the Negro everywhere has difficulty in paying his hospital bill. It might be added that for many years in the South Negroes resorted to hospitals only with extreme reluctance, so that they did not affect the statistical picture as much as might have been expected.

but in recent years this has changed entirely, as the work of the Duke Endowment in the past 15 years very convincingly shows.

For example, among the most significant of the long-term figures quoted by the Endowment is the one pointing to Negro births in hospitals in 1938 of 7 per cent, as compared with 1.7 per cent in 1924. This is a fourfold improvement, and it is this relatively enormous change for the better which is worth emphasizing even more than the fact that the hospitals' births in the Carolinas are even now only 25 per cent for both of the predominant races, as compared with a national figure of approximately 40 per cent. It is also true that there are even now in the Carolinas only 2.1 hospital beds per thousand for white patients, and 1.2 beds per thousand for Negroes; but this is a gain in the bed ratio of 41 per cent for white and of 45 per cent for Negro patients—an improvement in relative terms which certainly cannot be matched elsewhere in the country.

Service Increased Substantially

Since these gains are to a substantial extent to be credited to the work of the Duke Endowment and its fine board of trustees, with Dr. Watson S. Rankin as director of the Hospial and Orphans Section, some quotations from the Endowment's report on the situation are pertinent. They follow:

"Since 1924 the population of the Carolinas has increased 19 per cent, from 4,568,000 to 5,452,000. General hospital beds increased 73 per cent, from 5,688 to 9,821. In 1924 there were 1.2 general hospital beds per thousand of the population; in 1938, 1.8 beds per thousand population. The Carolinas are still far below the national average of 3.4 beds per thousand population. In 1924 there was one general hospital bed for every 800 persons in the Carolinas; in 1938, one bed for every 555 persons, the ratios in North and South Carolina being, respectively, one to 525 and one to 615.

"There are now 175 general hospitals serving North and South Carolina, whereas in 1924 there were 152, an increase of 23. The average size of these hospitals is 56 beds. In 1924 it was 37 beds.

"The increase in the number of patients treated in the hospitals of the Carolinas between 1924 and 1938 is a startling fact; from 105,671 to 243,645, an increase of 137,974. In 1924 every 43d person was patient in one of the general hospitals; in 1938, one person of every 22. In 1924 one out of every 34 white persons was treated in a general hospital; in 1938, one out of every 17. For Negroes the figures are, for 1924, one out of every 81 persons, and for 1938, one of every 47.

"In 1924 the average period treatment of hospital patients was 10.5 days; in 1938, 9.4 days. This decrease in length of stay reflects improvement in the quality of professional care. The average white patient is in the hospital 8.9 days; the average Negro patient 12.8 days."

Uniform Accounting Methods Used

It is interesting to note that in the work of carrying out the purposes of the Endowment it has been necessary for the Hospital Section to initiate steps to secure more uniform and reliable accounting methods among the assisted hospitals, since it must be made clear what patients are to be regarded as free instead of as pay or part pay. Dr. Rankin has made careful studies of the work of the hospitals as provided by the Endowment's own investigations, and there have become available in consequence some of the most detailed and accurate figures on hospital operating costs which can be shown for any comparable group of hospitals in the country.

From these figures the following patient-day costs are derived, covering 120 general hospitals, broken down according to certain classifications which have a bearing on cost of operation: 10 hospitals averaging over 100 patients per day, $3.938; 9 white hospitals with schools, $4.467; 13 white hospitals without schools, $4.758; 32 white and Negro hospitals with schools, $3.81; 41 white and Negro hospitals without schools, $4.149; 7 Negro hospitals with schools, $2.32; 8 Negro hospitals without schools, $2.275.

Perhaps the best light on the Carolina situation as a whole can be given

(*Continued on page 60*)

Cabarrus County Hospital, Concord, N. C., one of 158 hospitals in the Carolinas which have received assistance from the Duke Endowment.

San Francisco Fair Hospital Ready for Any Emergency

Complete preparedness is the watchword behind the emergency hospital facilities which safeguard public health this year at the San Francisco Fair on Treasure Island.

The well-organized Exposition Emergency Hospital, located on the ground floor of the Administration Building treated 5,549 cases last season. On duty this year under direction of Chief Surgeon Joseph S. McGuinness are four doctors, a hospital superintendent, three nurses and four stewards.

Twenty-four hour service is maintained, with nurses and stewards standing eight-hour watches, and doctors four hours, with exception of an eight-hour shift from midnight to 8 a. m. Two ambulances are in service. Also subject to immediate call for emergencies are twelve additional doctors in San Francisco and Oakland, a dozen nurses and the same number of stewards.

The greatest number of patients treated on any one watch has been 70. On special days which draw greatly increased attendance to the Fair the hospital staff is enlarged and extra ambulances are placed in service.

Equipped for Emergency Cases

The hospital is equipped to handle any emergency case. Equipment includes two five-bed wards, one each for men and for women, and a two-bed isolation ward. Two cribs for children are provided in the women's ward. Large windows opposite the desk of the floor nurse on duty enable her to see into both wards and keep her patients under observation. Buzzer calls from patients register not only at her desk but on a special wall indicator in the office corridor, which saves many steps for nurses. Adjoining the wards are two well-equipped dressing-operating rooms, also an autoclave and sterilizing room. Facilities are also provided for testing eyes of the injured.

In these uncertain times, special precautions have been taken to provide adequate emergency facilities in case of some major public disaster. If the need should cause overflow of bed facilities, the hospital is supplied with extra mattresses. In an emergency there are enough of these when placed on the floors of corridors and rooms to care temporarily for a large number of patients. In addition, arrangements have been effected so that the entire emergency facilities of the San Francisco and Oakland hospitals could be called into service.

Every possible effort is made to avoid keeping patients in the hospital overnight. The general policy is to dispatch them as soon as this can be done with safety. This is primarily an emergency hospital, and it is felt that patients requiring longer periods of hospitalization can be cared for to best advantage in the regular hospitals in San Francisco and Oakland.

Causes of Accidents

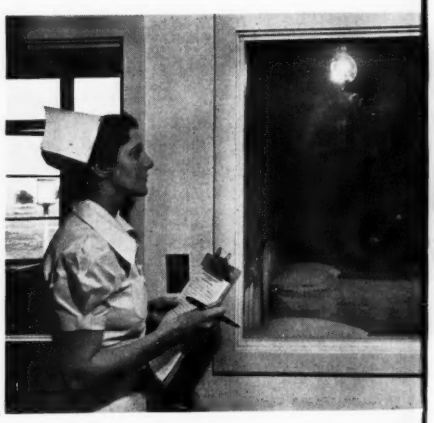
The great majority of accident cases requiring treatments are caused by fainting, falling and eating. Many cases are reported of syncope, gastro-intestinal upsets where people become excited, and heart conditions. Preoccupation with sightseeing is considered responsible for much of the stumbling and falling. In the eating cases, points out Dr. McGuinness, there was nothing wrong with the food—the patients simply ate too much of it. The hospital's rush hour period occurs around three or four o'clock in the afternoon, and between eight and ten in the evening. Some people try to see too much of the Fair in one day and overestimate their strength. At those times of the day people having weak hearts, especially on warm days, begin to collapse and require first aid treatment.

The hospital staff always expects a certain number of freak accidents. Among the unique injury cases, an attendant was bitten by a boa constrictor at the snake show; a man fractured his skull while trying to do a handstand on top of a piece of statuary, and there were a number of bites when people insisted upon petting monkeys, and animals at the dog show. While watching fireworks one night recently a 91-year-old visitor from Los Angeles fell into the Bay. After rescue by the Exposition fire department and treatment overnight at the hospital for shock and submersion, the oldster was discharged next day apparently none the worse for his experience.

Although scores of letters have been received from publicity-seeking women desiring to make use of the maternity facilities, the Exposition and the hospital authorities have sternly rejected all offers to have a "World's Fair baby" born there.

One of the two dressing-operating rooms in the Emergency Hospital at the San Francisco Fair on Treasure Island.

First aid treatment being administered by Dr. F. H. Hatlelid, assisted by Nurse Jeanne Hensler.



Nurse Agnes Acquistapace looking through observation window into the women's and children's ward. From the similar window to her left the floor nurse on duty can also see into the men's ward.

In addition to Dr. McGuinness, the staff includes Doctors Hall Seely, F. H. Hatlelid, Neil P. McCloy and Vance M. Strange. La Rita Scally is superintendent.

New exhibits are displayed this year in the Hall of Science at the Fair to acquaint the visiting public with the progress being made in the promotion of public health, medicine, institutional care and kindred fields.

Never publicly exhibited before is a display of Reconstructive Plastic and Oral Surgery sponsored by Arthur E. Smith, M.D., D.D.S., of Los Angeles. It consists of reproductions in natural color of faces of injured persons, and about 2,000 photos. The great majority of the individuals represented were injured in automobile accidents. The display visualizes the remarkable feats of facial reconstruction which have enabled these accident victims to resume their normal way of living.

The University of California has an elaborate presentation of the biological sciences, including a special section devoted to medical science. A large mural painting depicts the young doctor, thoroughly trained, about to undertake his service to mankind. In the background is the Medical Center, offering its facilities for examination and hospital services.

The California State Department of Institutions displays examples of handicraft in occupational and industrial therapy done in the five state mental hospitals.

"The Human Eye" is a five-section display sponsored by The Eye Physicians of the West and the California Association of Dispensing Opticians.

The American Dental Association presents "Dentistry Through the Ages" and exhibits showing the great clinical and scientific advances made in preventive dentistry.

"Magic Shadows" is sponsored by the Pacific Roentgen Club, stressing the importance of x-rays for diagnosis.

The California Heart Association presents a display called "Heart Disease and Public Health," and in an adjoining booth the American Urological Association, Western Branch, exhibits models and charts showing the scope of its work.

"The Story of Diabetes" features photographs and a giant size illuminated anatomical figure and is sponsored by Eli Lilly and Company in cooperation with the Exposition's Medical Committee.

Movies are used by the California State Department of Public Health to arouse public attention in its campaign against syphilis, and by the California Tuberculosis Association as part of its educational display.

"The Quiz Corner" attracts many visitors to the Metropolitan Life Insurance Company exhibit, and is a health knowledge survey conducted in cooperation with the U. S. Public Health Service.

Large photo-murals in the American National Red Cross display dramatize the part it plays in times of national disaster.

New Jersey Studies Problems of Care for the Chronically Ill

By EMIL FRANKEL
Director, Division of Statistics and Research, New Jersey State Department of Institutions and Agencies

Within the past few years private and public health and welfare workers have begun to recognize the fact that chronic illness is a distinct problem of present day society and one which is worthy of serious consideration if it is to be solved successfully.

By chronic illness we generally understand diseases of the heart, kidney, liver, and nervous system, as well as cancer, arthritis, rheumatism and like disabilities which last at least three months and frequently for years, and which require constant medical care and attention.

Longevity Increasing Problem

Modern living conditions have to a great extent relieved the general population of the danger of infectious diseases such as smallpox or plague; infant and child welfare movements have lowered child mortality rates considerably; present public health practices are all conducive to prolonging the span of life of the general population.

Long life, however, has not proved an unmitigated blessing to the majority of the population as a person rarely reaches the age of 65 without some symptom of chronic illness.

In 1901 the life expectancy of white males was 49 years in the United States; in 1937 it was 61 years; the life expectancy of white females was 51 years in 1901 and 65 years in 1937.

"Chronic" Not Necessarily "Incurable"

Up to the present time the treatment of the chronic sick has been greatly hampered by the widespread confusion of the terms "chronic" and "incurable." "Incurable" has a fatalistic sound which spells discouragement to the victim, means an economic burden to his family, and signifies defeat to modern science and medicine. Frequently, however, "incurable" is a too hastily pronounced doom which can be avoided by proper care and treatment.

Many patients suffering from chronic illness, although not incurable, require a long period of treatment before they can be rehabilitated. Other patients are victims of a lingering, slowly-progressive illness which requires constant care and attention. Still other patients have a fairly constant state of disease which demands careful supervision if it is not to become worse. All such patients require extensive medical, clinical and hospital facilities.

In addition to the medical aspect of the problem of chronic illness, the social and economic burdens connected with long periods of disability are so great as to demand careful consideration.

Vital statistics show that tremendous strides have been made in conquering diseases of early childhood, but that chronic diseases such as cancer, diabetes, cerebral hemorrhage, diseases of the heart and arteries, and nephritis have been taking an increasing toll of human life. For a number of decades there has been very little improvement in the death rates of people aged 40 and over, while at 60 and over there is some evidence that death rates are higher than in the past.

State-Wide Survey Made

A state-wide survey of chronic diseases in New Jersey was undertaken by the New Jersey State Department of Institutions and Agencies in 1931. A comparison of the care needed and received by 2,187 patients, carefully analyzed, showed that less than half of them were rendered suitable care, leaving 1,164 persons for whom modification of care would be necessary to be adequate for their needs.

Recent studies of recipients of public assistance have shown that the relief rolls contain a considerable proportion of the chronically ill. In the National Health Survey, chronic illness was found to have a definite relationship to economic status. The report states[1]: "Among the relief and the low income groups the frequency of chronic disabling illness and of the resulting disabling was considerably in excess of the frequency among the more comfortable groups."

In regard to the problem of chronic disease among recipients of old age assistance the old age division of the New Jersey Department of Institutions and Agencies makes the following comment:

It is well known that the incidence of

[1]The National Health Survey 1935-6. The Magnitude of the Chronic Disease Problem in the United States Bulletin No. 6, page 13.

illness increases with advanced age and that few persons of 65 and more escape some form of heart disease, arteriosclerosis, or one of the common inflammatory diseases of the joints.

It is shown, for example, in a recent study in one county that one-third of all persons receiving old age assistance were afflicted with heart disease. This included complications in the form of arteriosclerosis and high blood pressure. Fifteen per cent of all persons suffered from arthritis or rheumatism and about ten per cent from diseases of the digestive system. Three per cent suffered from genito-urinary diseases.

The incidence of cancer among aged persons is higher than for other age groups. Physician's services and facilities of specially equipped clinics are made available to persons suffering from this disease wherever possible, but the need for hospital care in an institution especially designed for this type of patient is immediate.

Chronic Patients in General Hospitals

There are as yet few institutions in New Jersey which recognize care of the chronically ill as their special function and adjust their programs and facilities in this work. General hospitals are with rare exception perfectly willing to admit for treatment patients suffering from acute exacerbation of chronic disease, but consider that their obligation does not extend beyond the point when active treatment has ceased to be noticeably helpful in the improvement of the underlying lesion. They are reluctant to admit patients whose chronic disease has passed the acute stage.

Returns from 38 hospitals show that on the day of a recent census there were 373 chronic patients in the hospitals, representing seven per cent of the total patient load on that day. Only a little over 22 per cent of these had been in the hospital less than one month, 27 per cent between one and two months, 37 per cent more than two months and less than a year, and 14 per cent have had continuous residence in the hospital of over one year. It is interesting to record that 14 patients were found to have been in the general hospital from five to 15 years.

An inquiry as to the difficulty of placing chronic patients brought the following answers from 50 hospitals:

Often	42 per cent
Occasionally ...	38 per cent
Seldom	20 per cent

As expressed by hospital administrators, it is apparently quite difficult to find appropriate accommodations and care for chronic patients suffering from the following diseases: heart disease, arteriosclerosis, carcinoma, cerebral hemorrhage and other paralyses, arthritis and rheumatism, and diseases of bones.

The New Jersey Health and Welfare Conference, which recently rendered its report, suggests the following possibilities of affording appropriate care to the chronically ill:

Program for Care of Chronically Ill

1. *Care of Patients in Their Own Homes.* If such a case is indigent or the patient and his family are not financially able to provide it, the community has the moral responsibility to provide necessary medical and nursing care, in addition to food and shelter. The actual and advisory nursing care usually needed in such cases could probably be supplied most practically by visiting nurses. General and specialized clinics for heart, asthma, cancer and the like, operated in general hospitals, might be practical as a source of treatment for many ambulatory cases cared for at home.

2. *The Nursing Home.* Such an institution providing nursing or custodial care now serves those who are able to pay for such service but who are unable to have it provided at home because of the physical unsuitability of the home or because of other reasons.

3. *Homes for the Aged* might broaden their programs to provide custodial care for chronics who are incapacitated and have such limited funds that they are unable to care entirely for themselves but not needing or being able to afford care in a private nursing home.

4. *Present Public Almshouses and Welfare Houses* may be adapted to care not only for the aged but for the chronically ill who may either be indigent or have some means of support. These institutions might be enlarged or expanded or cover medical and nursing care adequate for many chronic diseases. Graduated fees could be charged those able to pay.

5. *General Hospitals.* Such institutions might consider establishing for chronic diseases special wards, sections, or pavilions; establishing or affiliating with a convalescent or nursing home prepared to give proper attendant care to cases of illness after acute symptoms have subsided; or extending dispensary and special clinic service for some chronically ill, such service to include nurses with special training to convey to the homes of these patients prescribed methods of care.

Problems Studied by Essex County

A study of the problem of the chronically ill in Essex County (the largest county in New Jersey, with a population of 919,375) has recently been undertaken by the Essex County Committee on the Care of the Chronically Indigent Ill, composed of representatives of the Newark, Orange and Montclair Councils of Social Agencies and other interested hospital and medical organizations. The members[2] of this committee are: Dr. H. Roy VanNess, Chairman; Ruth Coon; Lesley W. Funkhouser; Edith Granger; Isabel C. Graves; F. Stanley Howe; Howard P. Hunt; Charles B. Johnes; Edith W. Johnson; Crane Lyon; Harriet L. Pierce; Ann Munn Pomeroy; Dr. Earl H. Snavely; Dr. Edward W. Sprague; Dr. Francis C. Weber; Rowan Whealdon; and Dr. Emil Frankel, Consultant.

In a communication addressed by the Committee to the Essex County Board of Freeholders (the governing body of the County) it is stated:

There are many more people in Essex County over 60 today than ever before, and this group is subject to the infirmities of age and degenerative diseases. Economic conditions are such that, unfortunately, many of the older people are unable to care for themselves adequately if overcome by any chronic disabling illness. Therefore, the problem of chronic illness in indigent persons is gaining greater importance. This means that the needs of caring for this group are constantly increasing. It should be met in a prompt and adequate manner and it becomes the duty of the county to assist the several municipal and private agencies in providing institutional care for the indigent who are suffering from chronic illness.

The number of beds available for the care of the chronic indigent sick is inadequate. It is not economically sound to care for this type of patient in a hospital which provides care for acute illness. It is recognized that a hospital bed can serve only four chronic patients in a year, while twenty-five acute cases may be cared for in the same period. Thus, it is necessarily expensive to care for the chronic ill in general hospitals.

The Chronic Patient in the General Hospital

Somewhat divergent views are held by competent students of the problem of the care of chronic patients as to whether they would best be cared for in a special type of institution or in the general hospital. Dr. Ernest P. Boas, Chairman of the Committee on Chronic Illness of the Welfare Council of New York City, makes this point:

A completely equipped and staffed hospital for chronic diseases must be the nucleus of the service for the chronic sick. The efficiency and standards of the whole service depends on the standards set by

(*Continued on page* 54)

[2]These members represent the following agencies: Hospital Council of Essex County; Montclair Bureau of Public Welfare; Montclair Council of Social Agencies; Montclair Bureau of Public Health Nursing; Social Service Bureau; Newark City Hospital; Essex County Tuberculosis League; Newark Welfare Federation; Orange Department of Public Welfare; Essex County Medical Society; Social Welfare Councils of the Oranges and Maplewood; Orange Memorial Hospital; Visiting Nurse Association of the Oranges and Maplewood; New Jersey Orthopaedic Hospital, Orange; and Mountainside Hospital, Montclair.

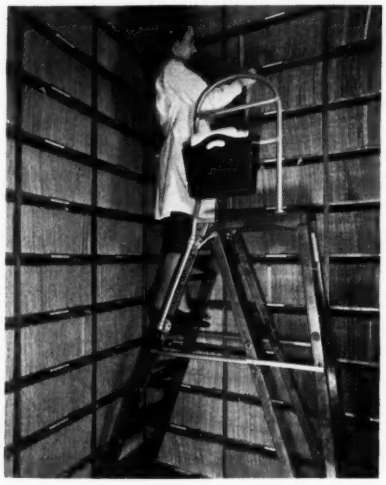
A corner of Samuel Merritt Hospital's medical record department and physicians' library.

Procedure of the Record Room At the Samuel Merritt Hospital

By ALICE G. KIRKLAND
Medical Record Librarian, The Samuel Merritt Hospital, Oakland, Cal.

When a great business enterprise produces a good product, such as a fine automobile, one is likely to look only at the product and not at the organization that produced it. The hospital is no exception. Yet in a hospital, behind the healed and satisfied patient, lies a precision of organization without which the institution could not function successfully.

No small part of this organization is the record library. Unknown to the public, it is nevertheless a highly important cog in the complicated machine which goes to make a hospital the great institution which it is. Comparatively new, it has grown to become a most important adjunct to every progressive modern hospital.



The filing room in the medical record department of The Samuel Merritt Hospital, Oakland, Cal.

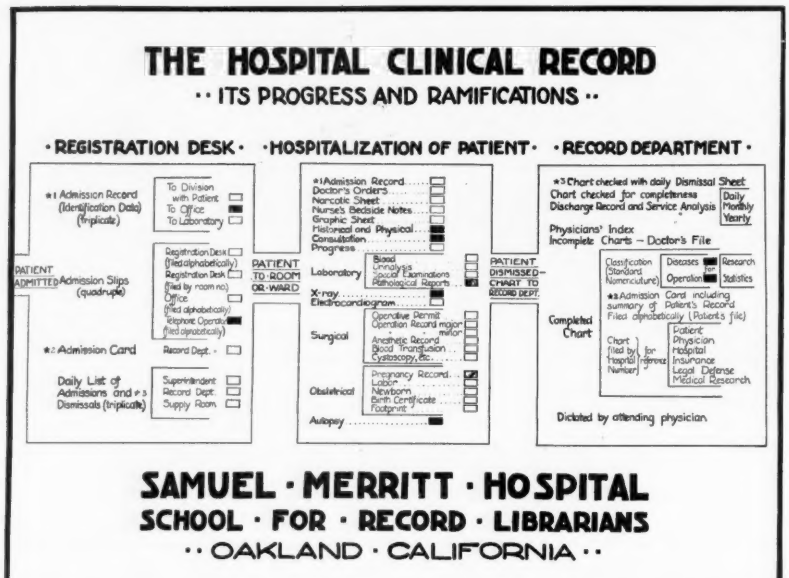
In order to appreciate better the medical records of today one needs only to examine the records of a little over 20 years ago, before the advent of the hospital standardization by the American College of Surgeons. On those old hospital medical records there was a place for diagnosis, but in many instances there was nothing on the record but the social data. This is not surprising, for the social data was obtained by a paid employee of the hospital whose duty it was to get such information on the admission of the patient, but there was no follow-up to see that the physician completed his part of the record.

This was brought home forcibly to me when requested to give an account of the number of babies born since the hospital opened its doors in 1909 up to the present time. For the first 15 years there was no other way to get this information but to go through record by record, and many times the only clue we had was the laboratory sheet which showed urine specimen before and after delivery. One can hardly realize in comparing medical records of today that such inadequacies occurred such a comparatively few years ago.

We may well ask ourselves what has brought about this change. In the history of our own hospital—and the same is true of nearly every other hospital in the country—there was no improvement in the medical record until the hospital authorities wished to have the hospital approved by the American College of Surgeons. As the medical record is more or less a criterion of the work done by the hospital and the doctors who bring their patients to its doors, one of the first steps toward this approval must be and is adequate records of every patient treated. In other words, to quote the late Dr. Charles Moots, inspector for the A.C.S., the medical record must show sufficient data to justify the diagnosis and treatment given. Further, these records should be filed in an adequate manner, available for staff conferences and for the future need of the patient. This, then, set up what is known today as the medical record department.

The problem then arose of trying to secure some one to take charge of this department, some one who had a knowledge of medical terms who could assist the doctor in the laborious task of writing records, but there were none trained for this new field. Hence telephone operators, file clerks or just any casual person were used to fill this important position. Some responded to the challenge and were successful in building up their departments; others failed sadly.

Through its representatives, the


THE HOSPITAL CLINICAL RECORD
·· ITS PROGRESS AND RAMIFICATIONS ··
· REGISTRATION DESK · · HOSPITALIZATION OF PATIENT · · RECORD DEPARTMENT ·
SAMUEL · MERRITT · HOSPITAL
SCHOOL · FOR · RECORD · LIBRARIANS
·· OAKLAND · CALIFORNIA ··

A.C.S. did much to increase the efficiency of the record departments and, through the sympathy of its repsentatives and the understanding of the problems of the record clerk or historian, did much to educate her as to the requirements for a complete medical record.

I can well remember one such representative several years ago calling attention to our surgical records which showed in many instances merely "appendectomy" or just "gallbladder removed." He explained the surgical record should show the pre- and post-operative diagnosis, findings, and procedure or technique of the operation.

Having been shown the requirement, the next problem was to find a way to meet it. It was almost useless to ask a busy surgeon, after the patient had gone home and the chart had reached the record department lacking in this respect, to try and refresh his memory for such details. The place to get this information was surgery itself. By securing the cooperation of the surgery supervisor, the record department was notified when the operation was almost completed, giving time to go to the surgery before the surgeon left.

At first, not only eyebrows were raised in a questioning fashion but some came right out and said, "What are you doing here?"

One by one we got the surgeons to see the advantage of dictating their surgery notes immediately following operation when it was fresh in their minds, and it was not long before the cry went out, "Where is the librarian? I want to dictate!" So great was the demand for such service that when our new surgery was built a special place was reserved for the surgical stenographer with a desk, noiseless typewriter, and easy chair for the dictator. This space is, of necessity, in a strategic spot, just opposite the entrance door to surgery, so that she may have an opportunity to remind the surgeon to give his findings, for as of old many would still be content to say "appendectomy."

Hospitals and doctors in the last 20 years have become more and more record conscious with the advancement of medical science. Also, the increasing number of law suits with cases lost due to inadequate medical records has undoubtedly played a large part.

Record Begins on Admission

The record of the patient begins almost the minute of entrance to the hospital, at the registration desk. Here the social data is secured and before the patient is put to bed the record is started on the floor—the admission sheet which has accompanied the patient, the doctor's orders, bedside notes. The laboratory technician is on the way for a routine blood and urine, for that department has immediately received a copy of the admission record of the patient. The dietitian, record department, business office are all notified that the patient has arrived so that their part of the record may be started.

Now let us examine the procedure of the record department:

A copy of the daily admission and dismissal sheet compiled by the registration desk is sent to the record department each morning, together with an admission card giving the hospital number of the patient, full name and address, age, room number, date of admittance and name of attending physician. These cards are filed in a "temporary" file during the time the patient is in the hospital and until the patient's record is complete and ready for filing.

It is a ruling of the hospital that the patient's chart must be sent to the record department as soon as the patient is dismissed. However, rules may be made but for some reason or other not carried out, so a careful check is made with the dismissal sheet mentioned above to see that there is a chart for every patient dismissed; if not, the hunt begins.

Content Must Be Checked

We are now ready to check the patient's record to see that all the necessary data are included. This requires first of all a knowledge of the minimum standard for case records as prescribed by the American College of Surgeons and in addition a knowledge of the hospital requirements in special instances. It requires a knowledge of the various tests incidental to certain diseases and of the numerous minute details which must be watched.

It has been stated many times that the record librarian need not concern herself with the qualitative part of the record; yet, the wide-awake librarian will forever bear in mind that the record must contain sufficient medical data to justify the diagnosis and treatment given. In other words, she is the watch dog of the medical record.

If the attending physician has not completed his part of the record, it goes into his special file and his attention is called to the deficiency. I might add here that Merritt Hospital does not have intern service and is dependent upon the attending physician for the complete record. In order to aid the doctor in this task, expert medical stenographers in the record department and surgery are at his service.

Having checked the record, the next step is entry in the book, "Daily Analysis of Hospital Service." This is nothing more than a daily distribution sheet something similar to that used in a regular business office designed to aid us in "medical accounting." This is particularly valuable because the figures for the monthly analysis report are all compiled and ready at the end of the month.

The next step is the physician's index wherein we enter on each doctor's page the case number, name of patient, type of case, whether treated medically or surgically, and condition of the patient on discharge.

Following this all incomplete records are filed in the doctor's file as mentioned above.

The complete records are now ready for classification as to disease and operation. We use the Standard Nomenclature of Diseases and the visible file index, being able to get 260 entries on a three-fold card. Buff colored cards are used for diseases and salmon colored cards for operations.

Following this procedure, the next step is to remove the entrance card from the "temporary" file and fill out the remainder of the card, i.e., date of dismissal, final diagnosis, operation if any, condition on discharge. This card is then filed alphabetically in the permanent file. It serves two purposes: 1) summary card. 2) patient's index. (We use the progressive filing system rather than a yearly file.) The chart is now ready for filing according to the patient's hospital number. We have discarded the heavy manilla folders and use instead a heavy paper envelope, open at the top, on which is stamped the hospital number of the patient. We do not use the ordinary steel filing cabinet but the charts are filed numerically on open shelves in a vault adjoining the record room. This is sufficiently large to accommodate records for five years.

Records Filmed for Storage

When there is no more available filing space we have adopted the new method of "filming" the record on a 16 m.m. film and these films are filed in the record department. Thus ten years' records may be kept in the space of one ordinary desk drawer. For reviewing the film, or record, a "viewing box" is kept in the record department. In this way we have our records immediately available at all times.

It is difficult to put all the work done in the record department, or all the many demands upon it, in a "nutshell." The accompanying chart shows how the record is started at the registration desk, what records are accumulated on the chart while the patient is hospitalized, and the work done with the record after it reaches the record department. One thing which we are unable to show is the color scheme of our forms. Each report is on a different colored sheet which facilitates easy reference.

(*Continued on page* 55)

Jewish Tuberculosis Ass'n Holds National Convention

With an attendance of over 300 delegates from all parts of the United States and some 700 Southern California members, the Jewish Consumptive and Ex-Patients Relief Association held their biennial national convention, from July 4 to 7, at the Hollywood-Roosevelt Hotel in Los Angeles.

The keynote sounded by the opening addresses, by President J. A. Rosenkranz, Samuel H. Golter, executive director, and Dr. Joseph M. Rosenblatt, medical director of the association, hit upon the most timely topic of America's livelihood, that "Survival of our domestic health institutions is as vital to America's national defense as our planes, ships and cannons. The world upheaval," they said, "should cause us to intensify, rather than slacken our health activities."

In a round table discussion, Drs. Leon Shulman and Barnett Stiverman of New York, pointed out that tuberculosis in children from 5 to 12 is rare, but after 12 years, signs of the disease begins to show. By systematic checking and care of those infected, the dread disease could eventually be curtailed and controlled.

Other medical men revealed that the spread of tuberculosis among children could be checked within 20 years by compulsory examination of all children when they reach the age of 12 and a yearly check on them thereafter.

Dr. George Parrish, Los Angeles city health officer, stated that bad housing conditions were a contributing factor in tuberculosis. He urged all members of the association to report the finding of unsanitary dwellings to the health department "so that we may attack tuberculosis at its source. If our housing conditions were better, we would not have so much tuberculosis," he said.

In his annual report, Mr. Golter called attention to the fact that 28 groups have joined the association during the past year, making a total of 79 groups or organizations throughout the nation who are now supporting the Jewish Consumptive and Ex-Patients Relief Association projects—the Los Angeles Tuberculosis Sanatorium at Duarte, Cal., the Ex-Patients Home at Belvedere, Cal., and the various Southern California clinics.

At the final session of the meeting, Charles Zimmerman and Samuel Shore of New York City, S. H. Faverman of San Francisco, and Chain Shapiro of Los Angeles summarized the history and accomplishments of the Los Angeles Tuberculosis Sanatorium or "The City of Hope" as it is more familiarly known.

The City of Hope was founded in 1913. After a careful check on other localities, the town of Duarte was selected because it is in what is known as the dry belt of Southern California. There are now 17 buildings on the grounds.

During 1939, 88,226 hospital days of care were given to patients who came from practically every section of the United States. The annual budget of The City of Hope is $400,000. This includes all branches of service in addition to hospitalization, such as the adult clinic, the children's clinic, and the rehabilitation department. This budget, however, does not include such funds as were needed for modernization and expansion of the Ex-Patients Home.

The association now has facilities and accommodations for 250 patients. The Los Angeles Tuberculosis Sanatorium cares for 180 patients. When

Aerial view of the Morris Hillquit Memorial Hospital on the grounds of "The City of Hope" at Duarte, Cal.

these cases have been discharged, they are transferred to the Ex-Patients Home for rehabilitation. The home cares for 70 patients. Here, the ex-patient is prepared and provided vocational guidance to face the outside world anew. The institutions are always filled and there is a long waiting list.

The latest addition to the Los Angeles sanatorium is the Morris Hillquit Memorial Hospital, which was erected at a cost of $125,000. This building is rated as one of the finest and most scientifically equipped hospitals for tuberculosis in America.

Another unit, or separate hospital, will be erected on the grounds adjoining the Warner Memorial Clinic. Plans for this building are to be presented at the next convention.

New Diagnostic Building For Geisinger Hospital

Construction began July 1 on a new diagnostic building for the George F. Geisinger Memorial Hospital, Danville, Pa.; and it is expected that the unit will be ready for occupancy by December of this year.

The three-story structure will provide the institution with certain greatly needed facilities. The ground floor will contain a large central surgical supply room. Supplies used throughout the hospital will be distributed from this department by means of dumbwaiters.

The department of internal medicine will occupy most of the first floor. Offices will be adjacent to a complete suite of examining rooms, and in connection will be a clinical laboratory for the use of the medical department. Additional rooms are also provided on this floor for surgical dispensary services.

The second floor will contain a fracture room, operating room facilities and new treatment rooms for the department or urology.

The construction of the building will conform to that of the existing buildings. Furnishings and equipment will be complete and modern. When the new unit of the hospital plant is completed, the total valuation of the hospital property will be in excess of two million dollars.

Syracuse Hospital To Be Enlarged

With tentative plans completed, work will probably start next Spring on a project calling for the enlargement of the General Hospital, Syracuse, N. Y., Carl P. Wright, superintendent of the hospital, announced recently.

At present the hospital is a rectangular building. The remodeling calls for the erection of three more rectangular buildings to be added to the present structure so that the new hospital will be in the shape of a quadrangle with a court in the center. The old frame nurses' home at the rear of the hospital will be torn down, and it is planned to use one of the rectangular units of the hospital to replace it.

T. Walker Gaggin has been selected as the architect.

322 Municipal Hospitals Operated by 265 Cities

More than 322 accredited municipal hospitals are owned and operated by 265 American cities, according to a recent report made by the International City Managers' Association.

Operated as local governmental services, the hospitals have a total of about 80,000 beds and admit more than 1,200,000 patients a year. The Association said 55 of the 322 hospitals are operated jointly by cities and counties, and that all are registered by the American Medical Association.

In classifying the hospitals, the report listed 249 as "general," 38 as "tuberculosis," 14 as "isolation," and four as "tuberculosis isolation." The remainder are classified as to special type of service rendered—emergency, maternity or convalescent.

Of the total number of municipal hospitals, New York City operates 20, or nearly half of the 48 owned by cities of more than 500,000 population. St. Louis and Pittsburgh, with five and four hospitals respectively, follow New York City.

The report showed that 29 of the hospitals are approved for general internship training, 31 have accredited schools of nursing, and 39 are approved for both internship and schools of nursing.

Addition to St. Mary's Nears Completion

The new $100,000 five-story addition to St. Mary's Hospital, Knoxville, Tenn., which has been under construction since last October, will be completed late this month. The first floor of the new wing will contain the cancer clinic, a consultation room, office, waiting, emergency and sterilizing rooms. The second and third floors will contain the surgical department and patient's rooms. The new obstetrical department will be opened on the fourth floor, and the top floor will contain a complete diagnostic department.

South Carolina Announces Hospital Day Awards

The South Carolina Hospital Association has announced that the Columbia Hospital of Richland County, Columbia, S. C., won the Association's Hospital Day plaque for the year 1940. Honorable mention was awarded to Marlboro County Hospital of Bennettsville which had won the plaque for two years in succession and had made a strong bid for the honor again this year.

Two Bequests for Henry County Hospital

Esma Charlton, administrator of Henry County Hospital, Newcastle, Ind., has announced the gift of $5,050 from Horace G. Painter of Middletown, and a bequest of $2,500 in the will of the late William J. Murphy.

Architect's sketch of the new diagnostic building at George F. Geisinger Memorial Hospital, Danville, Pa.

California to Erect New State Hospital

Aaron J. Rosanoff, M. D., director of the State Department of Institutions of California, has announced that the state will start construction of a new hospital in San Francisco, on the grounds adjoining the California Medical College, which belongs to the University of California.

The new institution will care for acute psychiatric cases. The Department of Institutions will staff the hospital with doctors and nurses and will furnish all equipment. The University of California will staff the institution with interns and student nurses.

Plans for the building are now in the hands of the state architect. Bids have been called and construction will be started within the next 60 days.

Eye and Ear Infirmary To Benefit in Will

The income from half the estate of the late Miss Ruth Marsh, East Orange, N. J., is to go to the Paterson Eye and Ear Infirmary, Paterson, N. J., according to her will which was recently admitted to probate. The will stipulated that upon the death of the last of three trustees, not less than $100,000 is to go to the Infirmary as an endowment fund.

The testatrix also made a bequest of $5,000 for a bed in the Orange Orthopedic Hospital in memory of her mother, Matilda Beasley Marsh.

Medical Exhibitors Celebrate Anniversary

Celebrating its tenth anniversary, the Medical Exhibitors Association recently held a dinner meeting at the Hotel Roosevelt in New York. In his presidential address, C. H. Wantz, of the General Electric X-ray Corporation, revealed that following a series of conferences with federal officials, heads of more than 100 firms comprising the membership of the association are unanimously pledged to support a federal defense program.

Recalling the confusion caused in the nation during the last war by the cutting off of foreign medical supplies, President Wantz predicted that recurrence of such a situation is impossible today. Members of the association, he said, are building up reserves of wartime medical materials and plans are on foot to provide for the stepping-up of production to almost any required level.

Asa S. Bacon, superintendent, and Mrs. David W. Graham, honorary president of the Woman's Board of Presbyterian Hospital, Chicago, at a party given by the latter organization in honor of Mr. Bacon's completion on June 1 of 40 years of service with the hospital.

In addition to Mr. Wantz, other officers of the association are: Vice-president, H. J. Cowell, Lea & Febiger; secretary, F. M. Rhatigan, Bard-Parker Co., Inc.; treasurer, G. L. Sorenson, C. M. Sorenson Co., Inc.

New Hospital for Mount Vernon, Wash.

Construction of a $250,000 hospital will soon be started in Mt. Vernon, Wash. Tentative plans have already been drawn for the building and at the present time various sites are being considered for the institution.

Dr. David Lawson has been elected president of the group of Mt. Vernon physicians, surgeons and medical specialists who have formed an association to institute a drive for the new hospital. Other officers are Dr. W. W. Ebeling, vice-president, and Dr. Irving Lloyd, secretary-treasurer. Both public financial assistance within Mt. Vernon and federal funds are expected to be utilized in the construction.

Hospital Reference Book For Latin America

In pursuance of the plan to foster Pan-American relations, The Modern Hospital Publishing Company will shortly issue a reference book entitled "El Libro del Hospital Moderno," which will be written in Spanish for the use of Latin American hospitals.

The book will contain 34 articles dealing with hospital planning and construction, administration and organization, written by hospital authorities of the United States.

$150,000 Annex for St. Joseph's Hospital

Plans have been completed and ground broken for the new addition to St. Joseph's Hospital, Warren, Ohio. The approximate cost of the addition will be $150,000, including equipment, and the hospital capacity will be increased from 40 to 125 beds.

Turner Appointed Head of Penn Health Center

Pennsylvania's secretary of health, Dr. John J. Shaw, recently announced the appointment of a Pittsburgh specialist in public health as administrator of the new Allegheny County health center soon to be opened by the state in Falk Clinic, Oakland.

Addressing the annual banquet of the Allegheny County Medical Society in the William Penn Hotel, Dr. Shaw said Dr. O. E. Turner, who will receive his degree of master in public health from the University of Pennsylvania next month and will then assume charge of the clinic, will be assisted by consulting specialists in particular phases of medicine who will be selected on recommendation of leading medical men.

Dr. Shaw, outlining the public health situation in the county and state, forecast the expansion of facilities for venereal disease testing to include laboratories in Pittsburgh and Harrisburg, as well as the one the state now operates in Philadelphia, and revealed a drop here of 50 per cent in pneumonia mortality in the past year, due, he said, to the establishment of pneumonia stations at strategic points.

$500,000 Trust Fund For Five Institutions

A trust fund of approximately $500,000 has become available for the benefit of five charitable institutions, as provided in the will of the late Richmond P. Paine of Norfolk, Conn. The five institutions are the Litchfield County Hospital, Winsted, Conn., and the Hartford Retreat, the Connecticut Institute for the Blind, the Hartford Orphan Asylum and the American School for the Deaf, all of Hartford.

Additional Floor Opened At Cancer Hospital

An additional floor for patients was opened recently at the State Cancer Hospital, Columbia, Mo., bringing the use of the unit to full capacity, according to Dr. Theodore Eberhard, medical director.

Since formal dedication of the $1,000,000 structure on April 26, two of three floors of patients' rooms have been in use and the 56 beds have been occupied 90 per cent of the time. The third floor adds 28 beds for patients, and has made necessary the addition of four nurses.

New Hospital Planned For Hardtner, Kans.

Glen H. Thomas, Wichita architect, has been commissioned to prepare plans for the $125,000 Jacob Achenbach Hospital at Hardtner, Kans. Dr. H. L. Galloway, Anthony, Kans., has been engaged to head the new hospital.

New President for Richmond Plan

Robert C. Baker, executive vice president of the Central National Bank, Richmond, Va., has been elected president of the Richmond Hospital Service Association, succeeding Thomas C. Boushall, who has served as president of the organization since its inauguration in 1935. Mr. Boushall remains as a member of the board of directors.

Dr. J. Shelton Horsley, Jr., has been elected secretary-treasurer, succeeding Dr. Joseph F. Geisinger. M. Haskins Coleman, Jr., is the executive director of the organization.

St. John's "Floating Hospital" in 65th Year

A host of little children who are suffering from some ailment are sailing daily aboard the "Floating Hospital of St. John's Guild," for this year a new policy has been effected to give out 300 tickets for repeat daily trips to a special group of children so that they may go each day for this health-giving cruise. Until this year, tenement children and their mothers have been given only one day's outing, and the major portion of the 1,200 who sail daily are still in this category.

The ship, the only one of its kind in the world, is supported by St. John's Guild of New York City, a non-sectarian organization supported by private funds. It costs just 50 cents to send one of these tenement children for a full day's trip to the cool regions of the Lower Bay.

This young lad is being examined by Dr. Herman Anfanger of the staff of the "Floating Hospital" of St. John's Guild, unique ship which sails daily with 1,200 tenement children and their mothers for the cool regions surrounding New York City.

Children are kept busy during the day with the visits to the medical and dental clinics for examination and treatment, take cooling shower baths, and have games, motion pictures, and handicraft classes to amuse them. Mothers with small babies may leave them in the care of special nurses in the baby section. Luncheon of sandwiches, milk and fresh fruit is served to all.

This is the 65th year of these mercy ships, four former boats having been retired. The first was the old River Belle, a river steamer which was purchased to be remodeled into a "floating hospital." This first ship carried hundreds of babies suffering from cholera, which was then raging in the city. It was fully staffed by doctors and nurses, with wards for the very sick. Aboard was a free milk booth, the pioneer of all free milk distribution, and a program of teaching the mothers proper diet laws and hygiene was initiated. This first ship was launched in 1875, and since then 2,544,200 children and their mothers have made these trips during the torrid months of July and August.

London Hospitals Merge

With the amalgamation of two London special hospitals—the Golden Square Throat, Nose and Ear Hospital and the Central London Throat, Nose and Ear Hospital, Gray's Inn Road, the names of both institutions will disappear and a new title, not yet decided upon, will be adopted.

The Golden Square Hospital will be closed and the new building will be erected on a site which will include that on which the Central London institution now stands. The total cost will be about $1,000,000. King Edward's Hospital Fund has promised an initial grant of $75,000, and it will be necessary eventually to raise a building fund of approximately $750,000.

Hahnemann Hospital Opened in July

The new Hahnemann Hospital, built in San Francisco by the Homeopathic Foundation of California with contributed funds, was opened to the public the early part of July. The building is three stories high, of Class A fireproof construction and has a capacity of 70 beds.

Private, semi-private and ward accommodations have been provided. There is also a surgery department, consisting of two major and two minor operating rooms and a cystoscopic room; a maternity department; large children's ward, and emergency, x-ray, laboratory and dietary departments. The kitchen is equipped to serve 500 meals daily.

Directing the hospital is an executive committee composed of Dr. Howard M. Engle, Dr. Frank H. Cookinham and Dr. Joseph Visalli.

Two Hospital Plans Merge

The Hospitai Service Plan, Inc., of Norfolk, Conn., and the Hospital Service Plan, Inc., of Danbury, Conn., combined recently to form a single hospitalization service, serving all of Fairfield County. The merger, regarded as the first step in the eventual consolidation of all hospitalization plans in the state, is in accordance with suggestions made by the Governor's Committee on Pre-Payment Hospitalization.

Mercy Hospital Willed $4,000

Under terms of the will of the late Anna A. Russell, Mercy Hospital, Watertown, N. Y., is the beneficiary of $4,000. The bequest will be used to endow a room in memory of Miss Russell's parents and brother.

Morgan County Bequest

Maud Woodward, superintendent of Morgan County Memorial Hospital, Martinsville, Ind., recently announced the receipt of a $7,000 bequest from the William Eslinger estate.

Who's Who in Hospitals

SISTER CELESTE, formerly with St. Margaret's Hospital, Dorchester, Mass., has been named superintendent of Allegany Hospital, Cumberland, Md., succeeding SISTER ELECTA, who has been appointed superintendent of St. Mary's Hospital, Saginaw, Mich.

AGNES SHERMAN has been appointed superintendent of Owatonna City Hospital, Owatonna, Minn., succeeding MRS. BERNARD SOROSE.

BLAIR M. PATTERSON has been named superintendent of Elyria Memorial Hospital, Elyria, Ohio, succeeding A. EDWARD A. HUDSON.

ARKELL B. COOK, since 1938 the chief accountant for University of Michigan Hospital, Ann Arbor, Mich., has been appointed assistant director of the hospital, effective Aug. 1. Mr. Cook succeeds DR. ANTHONY J. J. ROUKE, who resigned in January to become medical director of Stanford University Hospitals.

ELEANOR E. PLIER has been named superintendent of Oconto Falls Hospital, Oconto Falls, Wis.

DR. GEORGE A. WILTRAKIS has been named managing officer of the Alton State Hospital, Alton, Ill., succeeding DR. F. W. SOKOLOWSKI, who resigned recently.

DR. JOSEPH S. SKOBBA, clinical director of Central State Hospital, Indianapolis, Ind., has been appointed superintendent of Muscatatuck Colony, Butlerville, Ind., succeeding DR. GEORGE E. DENNY, who recently resigned because of ill health.

LILLIAN A. GUILLOD, for over 22 years superintendent of The Convalescent Home of the Children's Hospital, Wellesley Hills, Mass., retired from this position on Aug. 1. She is succeeded by MARION C. BURNS, formerly medical case worker at the Boston Dispensary, Boston, Mass. A number of innovations in methods of caring for sick children took place under Miss Guillod's superintendency. One of the most important steps was the introduction of heliotherapy in 1922 when sun treatment was almost unknown in this country.

MILDRED CONSTANTINE, superintendent of nurses and assistant superintendent of Christ Hospital, Jersey City, N. J., has been chosen as superintendent of the Amsterday City Hospital, Amsterdam, N. Y., to fill the vacancy created by the recent resignation of EDITH ATKIN.

DR. H. BECKETT LANG, who for the past two years was acting medical inspector of the New York State Department of Mental Hygiene, has been named superintendent of the Buffalo State Hospital, Buffalo, N. Y., succeeding DR. JOHN A. PRITCHARD, who has been appointed superintendent of the St. Lawrence State Hospital, Ogdensburg, N. Y.

CHRISTINE HOYME, has been appointed superintendent of the West Union Community Hospital, West Union, Va., succeeding ANNA SWENDSEN, resigned.

DR. HARRISON M. STEWART has been named manager of the Veterans' Administration Facility, Rutland Heights, Mass., succeeding DR. WILLIAM E. PARK who has been assigned to the Administration's Washington office.

DR. J. F. KLEPFER, since April acting superintendent of the Central State Hospital for the Insane, Waupun, Wis., assumed the superintendency of the institution on July 1. He succeeds the late DR. W. A. DEERHAKE.

DR. L. L. LANCASTER is the new superintendent of the Polk County Hospital, Bartow, Fla., succeeding DR. J. L. HARGROVE.

DR. J. H. STEPHENSON has resigned as superintendent of Jefferson Davis Hospital, Houston, Tex., as of July 1. DR. S. R. HARDY has been named acting superintendent.

JESSIE M. SHOOLBRED, R.N., has resigned as superintendent of Ashland General Hospital, Ashland, Wis.

DR. LOUIS W. PARRAT has resigned as superintendent and medical director of the Utah Tuberculosis Sanatorium, Ogden, Utah.

THE HOSPITAL CALENDAR

Aug. 11-13. National Hospital Association, Houston, Tex.
Sept. Maine Hospital Association, Lakewood Inn, Lakewood, Me.
Sept. 13-15. American Protestant Hospital Association, Hotel Statler, Boston, Mass.
Sept. 14-16. American College of Hospital Administrators, Hotel Statler, Boston, Mass.
Sept. 16-20. American Hospital Association, Hotel Statler, Boston, Mass.
Oct. 16-17. Missouri Hospital Association, Connor Hotel, Joplin, Mo.
Oct. 21-24. American College of Surgeons, Hospital Standardization Conference, Stevens Hotel, Chicago, Ill.
Oct. Alberta Hospital Association, Palliser Hotel, Calgary, Alta.
Oct. Saskatchewan Hospital Association, Regina, Sask.
Oct. Ontario Hospital Association, Royal York Hotel, Toronto, Ont.
Oct. British Columbia Hospital Association, Empress Hotel, Victoria, B. C.
Oct. Vermont Hospital Association, Montpelier, Vt.
Nov. 8-9. Kansas State Hospital Association, Lamer Hotel, Salina, Kans.
Nov. 13. Colorado Hospital Association, Denver, Colo.
Nov. 16-17. Oklahoma State Hospital Association, Skirvin Hotel, Oklahoma City.
Dec. 5. Utah State Hospital Association, Salt Lake City, Utah.

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Feb. 26. Texas Catholic Hospital Conference, Galveston, Tex.
Feb. 27-Mar. 1. Texas Hospital Association, Galveston, Tex.
Mar. 3-6. Association of Western Hospitals, Fairmount Hotel, San Francisco, Cal.
Mar. 12-14. New England Hospital Assembly, Hotel Statler, Boston, Mass.
April 24-25. Mid-West Hospital Association, Hotel President, Kansas City, Mo.

Deaths

REV. DR. FREDERICK P. JENS, 74, superintendent emeritus of the Evangelical Hospital, St. Louis, Mo., died July 7 at that hospital of a complication of ailments. Dr. Jens was superintendent of the hospital for 42 years, retiring last January because of ill health.

Born in Jefferson City, Mo., Dr. Jens was educated at Eden Seminary in Webster Groves. He served as pastor of Christ Church in Maplewood, Mo., had his ordination and later was pastor at Inman, Kan. In 1897, Dr. Jens returned to St. Louis to become superintendent of the Deaconess Hospital.

The many friends of Dr. and Mrs. S. R. D. Hewitt, general superintendent of Saint John General Hospital, Saint John, N. B., will regret to hear of the death in action of their son, PILOT OFFICER DUNCAN A. HEWITT, R.A.F., aged 20. Pilot Officer Hewitt began flying when he was barely 16 and was studying aeronautics in London when war broke out. On his first aerial engagement he is reported to have brought down a big Heinkel bomber and, in a recent letter, wrote of "bagging" four Nazi bombers in France. A recent movie film portraying R.A.F. activities showed a close-up of Duncan in action during an aerial battle.

DR. ANTHONY G. WITTMAN, assistant managing director of Elgin State Hospital, Elgin, Ill., for the last 18 years, died July 16 in his home at the institution. He was 64 years old and had been in the service of the state welfare department for 30 years. From 1914 to 1918 he was attached to the Peoria State Hospital, and from 1918 to 1922 was assistant managing officer of the Anna State Hospital, Anna, Ill.

Adequate Space and Facilities Needed for Modern Out-Patient Departments

By E. T. OLSEN, M.D.*

The increasing establishment of out-patient clinics in hospitals and the increased and increasing patronage of those already established has been largely due to the humanitarian desires of the hospitals and of their attending staffs to relieve the distress of the large number of indigent and semi-indigent persons not able to pay for medical care. In some cases this service is rendered free of all cost to the patient. In others a nominal charge is made for registration and the clinic card, and for medicines.

The legitimate patronage of these clinics has become so large that the facilities of many hospitals have been greatly overtaxed. This results first, in a congestion and slowing up of all their facilities, and second, in an increased difficulty in the efforts of those attempting to serve these patients, with consequent possible impaired service. This must be a natural result when adequate space, equipment and other facilities cannot be provided, in spite of the desire and efforts of the physicians and others in attendance to render good service.

The practice of medicine today, in the office of the private physician, requires adequate space and all of the diagnostic aids necessary for the proper and complete examination of the patient. This same physician, rendering gratuitous service to the clinic patient in the hospital, should be provided with the same adequate facilities for good work.

For a number of years conditions at the University Hospital had been most unsatisfactory. Originally established as a teaching facility for the students in our medical school, the space assigned for the out-patient department was obtained by converting two large open wards in the west first floor wing to clinic purposes. These wards were divided into two longitudinal sections by a central corridor. Separate examining rooms were created by erecting cubicles in each section, and the clinic corridor was, of necessity, used as a waiting room.

The only toilet rooms available for the white clinic patients were those intended for the use of white visitors in the hospital main corridor, with one single toilet, adjoining the emergency room for colored (used jointly by men and women). The colored waiting room, because of lack of other space, was located at the extreme east end of the hospital corridor (Room "O"—Figure 1) and adjoining the old pharmacy (Room N—Figure 1). All patients from the clinic were also required to return to this pharmacy for their medicines.

Inadequacy Indicated by Survey

Preliminary survey and later study of the space and facilities for, and of the work of the out-patient clinic, social service and allied activities indicated clearly not only their inadequacy but also the need for prompt remedial action.

Discussion of means for a solution of the problem resulted in a plan to convert the nurses' residence, already also inadequate for its purpose, into a clinic building, and to request the Oklahoma Legislature for an appropriation for a new and modern residence for the nurses. The present nurses' residence is a two-story and English basement building located about 70 feet directly south of the then clinic wing.

As the need for relief in the clinic situation was immediate and imperative, a further study of the problem and our possible financial resources was made. Rough plans and suggestions for the construction of an addition to the clinic wing and for alterations in the hospital corridor for clinic purposes were submitted to the Superintendent of Construction of the University with a request to prepare plans, specifications and an estimate of the cost.

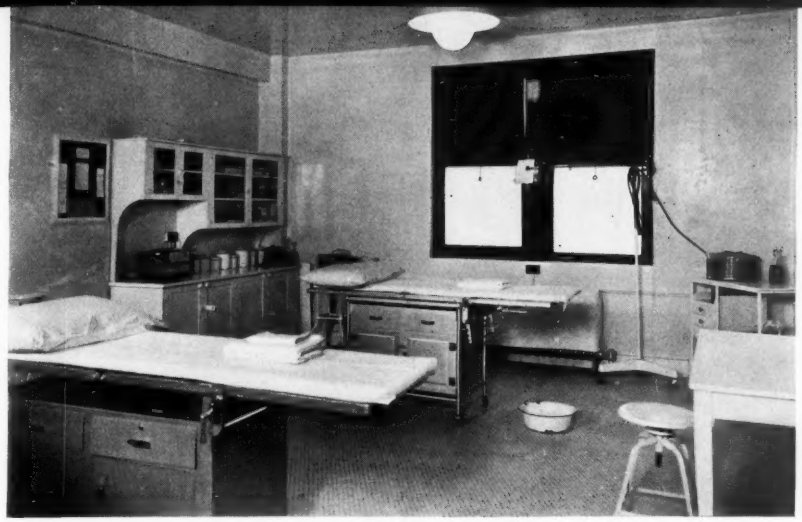
After several conferences it was found that lack of money prevented the letting of a contract for this project. We did find, however, that by the exercise of the most rigid economies in other expenditures from appropriated funds and through other anticipated income, and by the utilization of an Assistant Superintendent of Construction from the University and of skilled hospital maintenance personnel, together with the employment of such other day labor, skilled and common, as would be necessary to supplement our own personnel, the project could be carried to completion.

Work was at once begun on the new wing. Upon its completion it was immediately occupied for clinic purposes. Remodelling of the old clinic and the hospital wing followed. This part of the work caused some delay in the completion of the project, but, having control of the men and of the job, we were able to proceed section by section in such a manner as not to interfere materially with the work of the clinic or of that part of the hospital affected. This would probably not have been possible under contract, and it is believed that there was no real loss of time in the completion of the work.

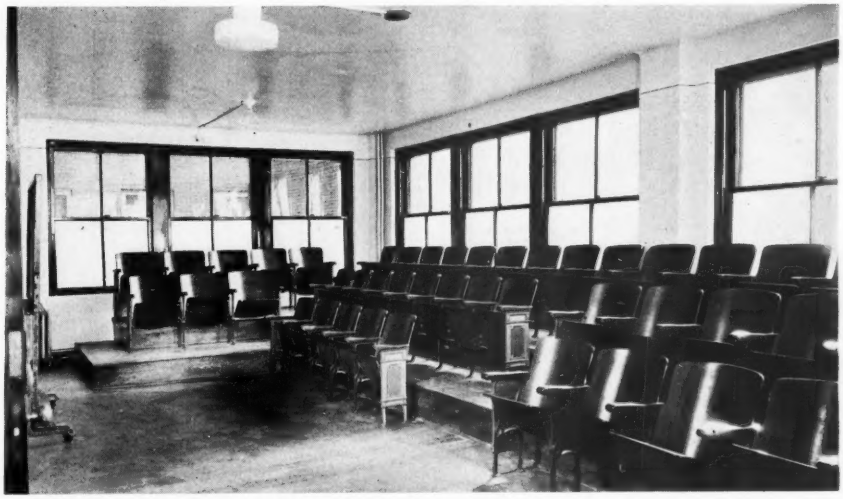
The new clinic wing is of reinforced concrete construction (foundation, supporting columns, floor and roof slab), steel I beam girders, brick walls and stone trim to correspond with the hospital building. The roof is insulated with rock wool and has a Florentine glass panelled skylight, with louvres for ventilation at both ends, extending over the central two-thirds of the roof. All examining rooms have full sized windows, small radiators, sinks with hot and cold water, ceiling lights, special wall sockets, and electric fans. All water, steam, gas and waste lines are accessible and run through a tunnel under the clinic floor, connecting with similar lines in the hospital building. Hot and cold water lines are of "stream line" copper pipe. Interior walls and partitions are of cement plaster on metal lath. Three-quarter length louvre doors were furnished for the

*Dr. Olsen retired in April, 1940, as medical director and assistant superintendent of State University and Crippled Children's Hospital, Oklahoma City, Okla.

In this article, the eighth of the series on the modernization of the hospital, Dr. Olsen relates how the out-patient department at Oklahoma State University and Crippled Children's Hospital was remodeled into an easily workable unit, one which provides the space and facilities necessary to meet its present and future needs.

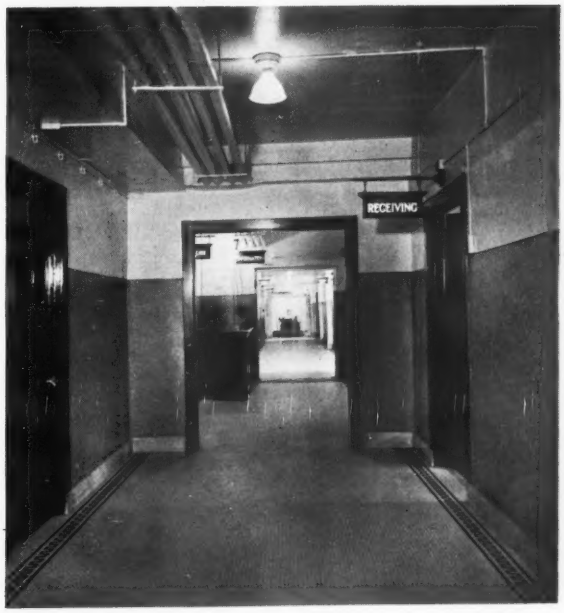


The emergency room in University Hospital's out-patient department was enlarged and completely remodeled as part of the modernization program.



A large classroom, seating sixty-five medical students, was added as part of the remodeling program. This room is equipped with lecturer's desk, view box for films and screen for lantern projector.

The corridor of the remodeled clinic wing, which ends at the far cased opening where it joins the new wing. In the foreground are the doors to the record room and the receiving room. The remodeled ambulance entrance adjoins receiving room on the right.



An interior view of the new clinic wing, showing examination rooms on the left and cubicles on the right. The entire wing contains seventeen rooms, ten cubicles, a sterilizing room, and a supply room for nurses.

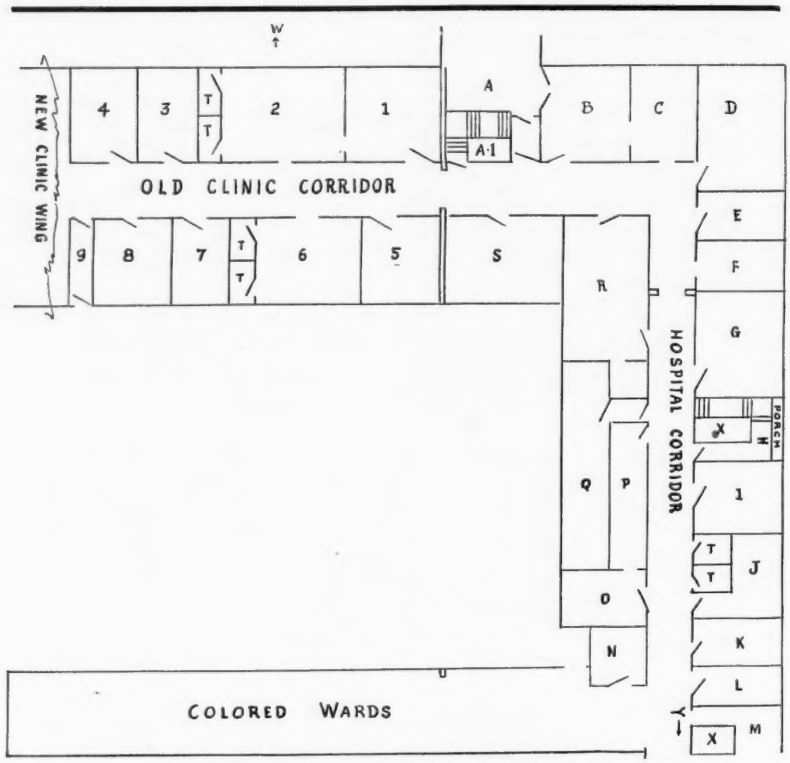


Figure No. 1. Remodeled Clinic

HOSPITAL CORRIDOR

A. Ambulance and Clinic Entrance
A-1. Stair well to second floor
B. Receiving Room
C. Admitting Room
D. Emergency Room
E. Director of Clinic Office
F. Stretcher Room
G. Class Room (25 medical students)
H. Passenger elevator and stair well
I. Attending Staff Private Lounge
J. Pharmacy Manufacturing Room
K. Clinical Clerkship Office
L. Obstetrical Department Office
M. Diet Kitchen—Colored Ward
N. Superintendent of Nurses Office
O. Chief Dietitian's Office
P. Student Dietitians' Study Room
Q. Class Room (65 medical students)
R. Record Room
S. Pharmacy (serves clinic and hospital)
T. Public Toilets
X. Elevators
Y. Corridor to administration offices and main lobby.

OLD CLINIC WING CORRIDOR

1. Registration Office (Clinic)
2. White Waiting Room
3. Fluoroscopic Room (Clinic)
4. Laboratory (Clinic)
5. Social Service Office
6. Colored Waiting Room
7. Social Service Office
8. Dentist's Office
9. Janitor's Exit to Yard

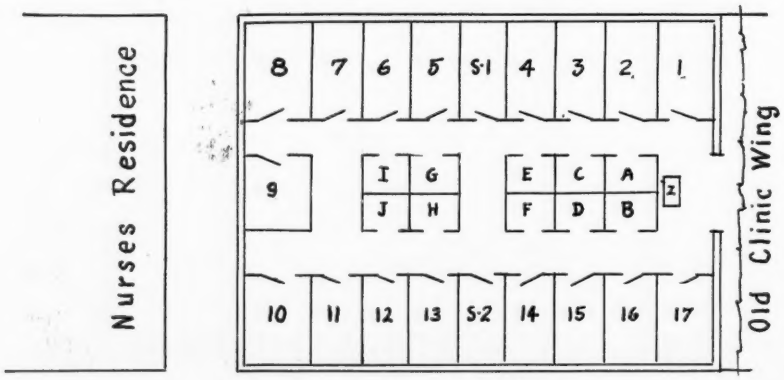


Figure No. 2. New Clinic Wing

Rooms 1 to 17, inclusive—examination rooms. Rooms A to J, inclusive—open cubicles (for taking histories by students). S-1—sterilizing room. S-2—supply room. Z—supervising nurse station.

examining rooms for summer use, together with awnings for all of the windows and for the roof skylight.

The extra labor employed consisted of the Superintendent of Construction from the University, one general foreman, and the necessary additional carpenters, bricklayers, plasterers and common labor required from time to time. All of the pluming, steam fitting, electric wiring, fixture installation, much of the carpenter work, and all of the painting and decorating were done by our own skilled hospital and maintenance personnel under the direction of our chief engineer and the chief mechanic. Union labor difficulties were obviated by the hiring of a union foreman, the employment of union skilled and common labor on a day basis when and where necessary, and the payment of "scale" wages for such help.

All materials and supplies were purchased by the hospital from wholesalers and jobbers in open market and on a competitive basis.

Costs of Construction

The total cost of construction of the new wing and the entire job of remodelling are given below. They include the cost of all materials, supplies, fixtures, etc., and all salaries and wages paid. They also include the salaries of our own hospital personnel during the entire period consumed by the project.

Cost of New Clinic Wing. $15,393.43
Cost of Remodelling Old Building 5,899.40

While perhaps not ideal, the present new construction, remodelling, and arrangement does meet our present and immediate future needs and makes an easily workable unit. It has met with much favorable comment by clinicians and administrators from other cities. The new wing can and will be connected with the nurses' residence (interval of eight feet) when that building becomes available for clinic purposes.

Advantages Gained

The advantages gained through modernization of the clinic may be briefly summarized as follows:

Largely increased amount of space and more convenient arrangement and location of all facilities and allied activities.

Larger and better lighted and ventilated examining rooms.

Cubicle facilities for taking histories by students, eliminating confusion in examining rooms, and speeding up the work of the staff doctors in examining and treating patients.

(*Continued on page 32*)

George Washington Bridge. Factor of safety: 4.

EVERY GREAT BRIDGE is built to withstand several times the load it must carry from day to day. The ratio of the maximum possible load, or breaking stress, to the regular load, or working stress, is called the factor of safety.

Human beings also need a factor of safety. The body should be capable of withstanding stresses far greater than it is called on to meet in everyday living. Vitamins are essential. However, ordinary diets usually fail to provide more than the minimal required amount of vitamins. Sometimes they even fail to supply the minimum.

Vi-Penta preparations facilitate administration of vitamin supplements in effective, easy-to-take, economical form. Vi-Penta Perles are tiny gelatin globules containing exceptionally high potencies of the 5 principal vitamins—A, B_1, B_2 (G), C, and D; Vi-Penta Drops are a concentrated palatable solution of the same 5 vitamins to be added to liquid or solid foods. Young and old can be assured of an adequate vitamin factor of safety by daily Vi-Penta medication. The Perles are intended for adults and older children, the Drops for infants and others who cannot swallow capsules.

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FOR THE HUMAN FACTOR OF SAFETY: VI-PENTA PERLES VI-PENTA DROPS

Out-Patient Departments

(*Continued from page* 30)

Central sterilizing and supply rooms which simplify and improve nursing and attendant service for clinic.

Increased and more expeditious laboratory service with technician in charge to supervise work of medical students.

Increased space for x-ray work for clinic.

Adequate waiting rooms for white and colored patients in close proximity to examining rooms and with separate toilets for men and women in each waiting room.

Receiving and admitting rooms adjoining each other.

Enlarged emergency room.

Office for Director of Clinic.

Stretcher room. (Stretchers previously kept in corridor when not in use.)

Pharmacy—relocated near clinic entrance.

Record room moved closer to clinic.

Increased space and facilities for chief dietitian and student dietitians.

Private staff lounge for members of attending staff.

Private office for superintendent of nurses (location of old pharmacy). Previously shared office with assistant.

Clinic Organization

Clinics are arranged on a definite schedule basis.

Clinic service is arranged and divided into three periods corresponding to medical school semesters (including June to September).

Clinicians are assigned to clinic service by the heads of the various departments, who are also responsible for the clinic service. Clinicians are also responsible for instruction and grading of work of students.

Hospital residents and interns are required to attend clinics of their respective services in the hospital.

Junior and senior medical students have definite clinic assignments. Attendance and character of work done is recorded by clinician and Director of Clinic.

Social service department interviews all new patients. Return dates given for further examination when indicated. Follow-up work done on all patients failing to keep return dates (clinic and hospital cases). Reference to other social agencies when indicated.

All metabolic cases referred to chief dietitian's office for dietary instruction.

All cases requiring hospital care and treatment are referred from clinic to admitting office for admission.

Clinic hours: 7:30 a. m. to 3:00 p. m. All patients required to register before 8:00 a. m.

Clinic Services:

General Medicine—8:00 to 10:00 a. m. All new patients examined before reference to other services.

Medical Specialties—10:00 a. m. to 12:30 p. m.

Surgery—12:30 to 3:00 p. m.

Surgical Specialties—12:30 to 3:00 p. m.

Obstetrics—12:30 to 3:00 p. m.

Gynecology—12:30 to 3:00 p. m.

Examining rooms are assigned to the various services in accordance with their needs and the number of clinicians on service from each department. All of the rooms are available for the general medical clinic during the early morning hours. The above arrangement divides the time so that all of the clinicians have definite hours for attendance. It also covers all of the branches of medicine methodically and enables a patient who must be referred from general medicine to one of the specialties to have his examination completed in one day.

Oregon's Hospital Service

(*Continued from page* 15)

they are successfully maintaining their local institutions.

5. In the areas beyond service distance of any hospital there are small towns in which one or more physicians have located. The population distribution does not appear to warrant establishment of even a minimum hospital but the question arises as to whether the communities would not be benefitted by first aid stations. These could be utilized for treatment of the very minor illnesses and for preliminary study of other cases which would, of necessity, be referred to more distant hospitals which are more completely equipped.

6. There are some areas in which population distribution would indicate that even a first aid station is not a practical possibility and, if the contour of the area as well as transportation facilities permit, ambulance service might assure the people a greater safety in illness.

7. There are some parts of the state for which it is impossible to provide any type of service. The population is very scattered and the people are in less danger when they are transported greater distances than they would be in any hospital which could be established.

In the above and in the entire analysis, the central thought has been to assure a safe type of medical and hospital care whenever this is possible and to find the means of doing this. To build a hospital which is incomplete, yet which would give the people a false sense of security, is a disservice. Unless the location is very isolated, it would be safer to transport the sick even beyond the 50-mile limit which has been used than to subject them to inadequate care. The usefulness of ambulance service in this effort is well shown in the state of Iowa. This is a state of scattered farm population and it has been found advantageous to provide an ambulance service from the University Hospital which brings the service of that hospital within reach of all parts of the state. Emergency cases cannot be taken care of by this means and to provide for this type of service the possibilities of an aeroplane ambulance is being considered. This type of ambulance has been used with success in some parts of western Canada which have similar problems.

Society Honors Dr. J. S. Greene

Dr. James Sonnett Greene, head of the National Hospital for Speech Disorders, New York City, was designated last month as the recipient of the fourth medal to be awarded by the American Laryngological, Rhinological and Otological Society in its 46 years of existence. The medal was awarded to Dr. Greene "for his unselfish devotion to the alleviation of speech defects in those thus afflicted, and for the success which has crowned his life-long efforts in having established the National Hospital for Speech Disorders."

Dr. Greene expressed appreciation of the honor but added that his hospital's treatment of 30,000 cases in 25 years had only touched the seriousness of the problem presented by the presence of 13,000,000 speech cripples in this country.

Appealing for an endowment to help cover the cost of the hospital's free work, which represents about three-fourths of its services, Dr. Greene said that he was "appalled by how little had been done for speech cripples. Our clinic," he continued, "is still the only medical institution in this country devoted solely to the rehabilitation of the speech sufferer. It has been overcrowded almost from the very beginning of its existence. Seventy-five per cent of its work of necessity has been free, and through the years it has had to struggle against lack of funds and against obstacles of every kind."

As the Editors See It

Information to the Public

One of the greatest difficulties in the hospital is to provide a means whereby relatives and friends may be given authenic information as to the condition of the patient, and it is the routine nature of the information or the uninterested manner in which it is given that has so often engendered a feeling that the hospital is cold-blooded and indifferent.

The problem is not an easy one and has been a great source of worry to the administrator. There is a large amount of information which the hospital cannot reveal even to the nearest relative; yet, the casual "doing well" or "no change" is neither satisfying to the inquirer nor is it a necessary brevity. Usually such scant information is due to lack of interest on the part of the person answering the inquiry. Something between the casual report and furnishing detail must be evolved.

In a large percentage of hospitals the inquirer is referred to an information clerk, who is supplied with reports which give only essential information. Of necessity these reports are brief and of a routine nature. If the information clerk is really interested and trying to leave a good feeling in the mind of the inquirer, she often phones the floor to supplement the information contained in the report. This, however, takes the nurse from her regular duties and is time-consuming.

The hospital hostess has been tried and is reasonably satisfactory, but she is compelled to spend a great deal of time among the patients and consequently is often not available to answer questions.

Recently we saw a modification of the hospital hostess idea which we would like to pass on. An information nurse is assigned to this specific duty. She comes on duty at 7:30 a. m. and finds a night report giving the routine information about every patient in the hospital. From these she selects those about whom something more specific may be required by relatives and goes to the floors to secure this. She does not bother the nurses but instead she may study the chart or even visit the patients. At 10 a. m. she is ready to answer questions, an arrangement which is made known to the general public. As a result, most inquiries are received between this hour and noon. In case of patients who are on the seriously ill list she may phone the floor for the latest information, but usually her knowledge of the patient is sufficient to allow her to satisfy the inquirer without the necessity for disturbing the nurse on the floor.

This demonstration of personal concern, together with a tone of voice which sounds interested, are two vital necessities in combatting the imputation of disinterestedness of which we are so often accused. We are all interested in our patients but in addition we must show that interest if we are to impress the public with the idea that we regard ourselves as organizations and individuals who are really anxious to render public service.

Busy Time Coming Again

It is hard to realize that the vacation season is almost over and that, with the beginning of September, all the activities which we have suspended during the hot months will be resumed. Probably most of us have made our plans a long time ahead but there are always a lot of details that come up at the last minute and, as far as possible, these should be arranged before we get engulfed in the work of the coming winter.

First, of course, our thoughts turn to the two great national conventions, that of the American Hospital Association in September and the American College of Surgeons Conference in October. These are not usually regarded as a prolongation of the vacation season but as an educational activity in which, by contacting others, we get help in solving old problems and inspiration to meet the new ones that are constantly arising in our rapidly developing sphere of work.

The American Hospital Association convention for 1940 will naturally be concerned to a great extent with the war situation as it will affect our organization as a whole and its individual institutions. Organized medicine is engaged in an analysis which will show which physicians can be made available for war service without detriment to the civilian population. Every commercial group is also giving the same cooperation to the federal government, and we are informed that the American Hospital Association plans similar action. The trained administrators and the skilled personnel of civilian hospitals can be used to advantage in military service, but we believe that they should be so selected as to cause the least possible interference with the operation of these institutions.

Two reasons appear to be adequate to support this point of view. First, the civilian population will still require hospital care regardless of how deeply we may become involved in the war. This is our primary function. Second, however, is the fact that we shall probably be required to assist in caring for the greatly expanded army. Army, Navy and Veterans' hospitals will be insufficient to care for those in war service and, unless a great program of expansion is undertaken our civilian hospitals will, of necessity, be drafted.

From the personal point of view the convention of the American Hospital Association and the American College of Surgeons will afford all of us a great opportunity to become more familiar with the generalized problems of our hospitals. In addition the unequaled exhibit of supplies and equipment furnishes an opportunity to become acquainted with the latest developments in these lines.

Getting back home we have our local plans to consider, one of the greatest of which is the reactivated medical staff. The physicians in our hospitals are primarily interested in the professional care of their patients and few of them are organization minded. The administrator must therefore assure the guidance and in this he or she, whether a physician, nurse or a business excutive, is handicapped by the fact that he or she is not practicing medicine.

Tact and diplomacy will, however, insure a proper control of the medical staff. The wise administrator

HOSPITAL HIGHLIGHTS

20, 15 and 10 Years Ago

From HOSPITAL MANAGEMENT, August, 1920

Plans were announced for the establishment of a $1,000,000 hospital in Los Angeles, to be known as the University Hospital, Medical College and Clinic, with a capacity for 250 patients.

Dr. Harry J. Moss resigned as superintendent of the Hebrew Hospital, Baltimore, to become director of the New Brownsville and East New York Hospital, Brooklyn; Frank Wing was appointed director of the Boston Dispensary, succeeding Michael M. Davis, who became connected with the United Hospital Fund.

From HOSPITAL MANAGEMENT, August, 1925

Dr. Karl H. Van Norman resigned from Charles T. Miller Hospital, St. Paul, to become director of the Western Reserve University Hospitals, Cleveland; James R. Mays became superintendent of the new Homeopathic Hospital, Providence, R. I.; Dr. B. W. Caldwell resigned as superintendent of University of Iowa Hospital, Iowa City.

From HOSPITAL MANAGEMENT, August, 1930

Emily L. Loveridge, for 40 years superintendent of Good Samaritan Hospital, Portland, Ore., retired from active duty.

George W. Wilson was appointed superintendent of Toledo Hospital, Toledo, Ohio; John C. Dinsmore was appointed superintendent of the University of Chicago Clinics; Oliver H. Bartine was appointed superintendent of Bridgeport Hospital, Bridgeport, Conn.

does not, as a rule, appear as the guiding force. He works quietly behind the scene. He prepares the ammunition and gets some member of the staff to shoot it. Usually he does not get credit for what he does but he secures results and that is what we are really looking for.

Nursing, dietetics, housekeeping, maintenance, in fact every department of the hospital offers its problems which should be solved before they become pressing. Surely we have a strenuous time ahead and we must get busy even though the natural lassitude of summer and the vacation season predisposes to inertia.

Lines and Letters

(*Continued from page 6*)

in therapeutics, and for teaching purposes, a certain minimum volume of clinical cases is indispensable.

For purposes of illustration, think what an ophthalmologist would regard as a minimum number of beds for the economical care, under ideal conditions, of all varieties of eye work with the full equipment of a modern eye institute. Given such equipment, the ophthalmologist installed in a general hospital has many advantages over one in a special eye hospital, and the inclusion of "specialties" in general hospitals should be encouraged. But if the eye service in the general hospital is denied an eye resident, if it is denied its own operating room, if it must be content with the services of a pathologist having no special proficiency in eye pathology, if it must accept the relatively unskillful service of nurses on general or miscellaneous surgical duty, it cannot be regarded as an ideal ophthalmological service from an administrative or any other standpoint. Considerations of economy require that the overhead costs of a fully equipped special service be spread among a substantial number of beds. The inclusion of private patients materially affects the required total.

Make a similar analysis for each of the recognized medical and surgical specialties, sum up the total number of beds required, add all of these specialty beds to the basic requirements of wards from general medicine, general surgery, pediatrics and obstetrics, and you will find that you have a hospital unit considerably larger than 250 to 300 beds. The inclusion of private patients materially affects the required total.

In an article published many years ago, I analyzed hospital practice from this point of view, and concluded that the most advantageous set-up required a hospital of from 500 to 600 beds. In a large city, a municipal hospital might be expanded to 1,000 beds for general hospital purposes, or even a little more if wards for communicable diseases and a psychiatric reception unit were included. When, however, a municipal hospital gets bigger than this, it begins to suffer loss of that intelligent control which is possible only when the responsible administrator has at least a speaking acquaintance with the hospital's professional and most of its non-professional staff.

Unfortunately, some hospital administrators still have only a vague idea of what a hospital owes to its staff in the matter of facilities for ideal clinical practice. I am sure you will agree that the way to determine the size of a hospital is to find out what physicians need in volume of patients and in equipment for the progressive practice of medicine.

It does not follow that every hospital can be an ideal hospital in this functional sense; large communities only can supply all the elements of a comprehensive medical organization, ready to serve in any set of circumstances calling for complete multilateral clinical activity. Small communities must be content with hospitals of a more fragmentary character. Such hospitals serve a useful and even necessary purpose; they are capable of covering a large segment of medical practice, and may offer to patients a more congenial environment than that of a huge, departmentalized institution. But close analysis shows that they have unavoidable deficiencies, and in any incomplete hospital, emergencies may arise that cannot be dealt with as effectively as in hospital which is comprehensive and complete in its organization and equipment.

S. S. Goldwater, M.D.
Commissioner

Department of Hospitals
City of New York

Dr. Goldwater has brought up a big subject. Before discussing it, however, we wish to emphasize that the statement that a hospital of 250 to 300 beds is ideal was a quotation and not an opinion. Also we were thinking of administration, as we were in an editorial in the July issue of HOSPITAL MANAGEMENT. If a hospital is not efficiently administered it cannot give good care to the patients who are admitted, regardless of its size.

We agree with Dr. Goldwater as to the 1,000-bed hospital in a large city, such as New York or Chicago, provided it is properly administered. Is it not very generally recognized that an extremely large unit is very apt to be an inefficient unit? If the large hospital is advisable, as argued in the letter, would it not be better organized if divided into several separate units, each working under a central control?

The size of the hospital must, as Dr. Goldwater states, depend on the amount of material. Yet we cannot say that the hospital of 250 to 300 beds is necessarily inefficient. The number of such hospitals that have become recognized as outstanding is ample proof of this fact. They may have greater difficulty in securing the personnel and medical staff that are recognized as being necessary but they can and do give good care to the patient.

We believe that it is impossible to make any general statement as to what is the most desirable size for a hospital. Within reasonable limits almost any hospital can be efficient. The hospital which may be very desirable and most efficient in New York or Chicago might be ridiculous and inefficient in a smaller city. Every case must be judged individually, and so long as the hospital does not become so large as to become unwieldy, it may be competent in spite of its size.

THE BUYER'S PROBLEM

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That about sums up the buyer's daily problem, whether he is purchasing for his store, his factory, or his hospital. You may find some helpful purchasing ideas in these suggestions:

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Where to Buy? From the firm whose product best meets your requirements, is priced at a figure consistent with its real value, is branded with an established name.

When to Buy? The sellers of branded merchandise can tell you, for it's important to them to help you buy at the best prices possible. Such firms look forward to selling you many times, and know that is possible only if you have confidence in them.

The 98 members of Hospital Industries Association listed below represent the type of firm that can answer your question "What, Where, When To Buy?"

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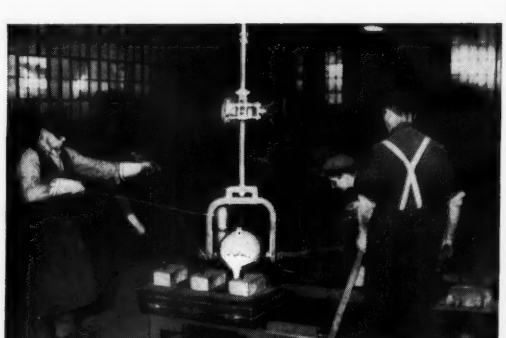

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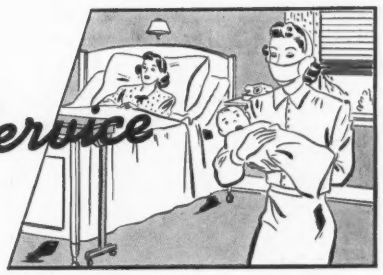

EDITORIAL DIRECTOR: Helen Esther Gillespie, R.N., Children's Memorial Hospital, Chicago.

Sterilization of Aqueous Solutions

By WEEDEN B. UNDERWOOD
American Sterilizer Co., Erie, Pa.

Careful analyses by the potentiometer method of measuring temperature of fluids undergoing sterilization in the pressure sterilizer bring to light some very interesting facts which define clearly what the process must involve to avoid common errors.

Based upon inaccurate assumptions, the idea is pretty general that certain heat-sensitive, commonly used fluids such as procaine and many forms of media cannot be sterilized successfully in the pressure sterilizer but must be sterilized by the fractional method, in non-pressure steam on three successive days. Some hospitals follow this practice which is relatively expensive and tedious, or, using the pressure method, find some fluids reacting badly to sterilization, as, for example, procaine discolored, which renders it more or less unfit for use since discoloration implies some chemical alteration.

It is quite true that careless handling of the sterilizer, use of too much heat or unduly prolonged exposure to sterilization will destroy or seriously impair the usefulness of many fluids. When difficulty is encountered the cause is almost invariably "over-sterilization." Calculating the period of exposure to accommodate the load does permit perfectly satisfactory sterilization of nearly every fluid encountered in the laboratory as well as all of those commonly used in the surgery in any modern, temperature controlled, pressure sterilizer.

Calculate Exposure to Accommodate Load

But calculating the exposure period to accommodate the load refers specifically to the individual flask or bottle, not to the number of units in the sterilizer. For example, 1,000 cc. flasks of saline or dextrose are normally and properly sterilized in 15 minutes' exposure, with the sterilizer operating at maximum controlled temperature of 250 to 254° F., while the average small bottle or flask of procaine (one or two ounces of fluid) will receive the same sterilizing effect by exposure for 8 minutes. Obviously, the two containers cannot be sterilized in the same load. Sterilization for 15 minutes would badly discolor the procaine.

The three temperature charts (Figure No. 1) clearly illustrate the point.

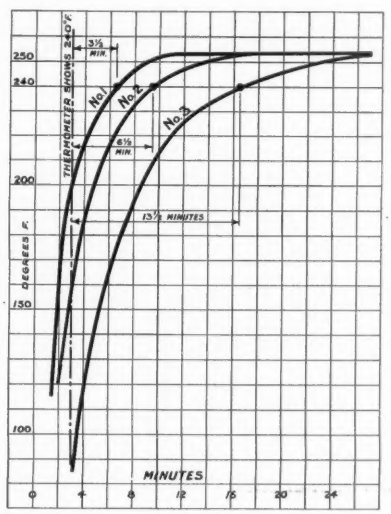

Figure No. 1

These curves show the results of potentiometer tests, indicating the rate of heating of various sizes of solution containers.

Curve 1. 2-oz. glass bottle containing 1 oz. of procaine. Temperature 240°F. attained in 3½ minutes.

Curve 2. 1000 cc. flask containing 750 cc. of salt solution. Temperature 240°F. attained in 6½ minutes.

Curve 3. 2000 cc. flask containing 1500 cc. of salt solution. Temperature 240°F. attained in 13½ minutes.

For these tests, the sterilizer was operated at controlled maximum temperature of 250 to 254° F. Temperature of the fluid was measured by an accurate potentiometer with thermocouples inserted directly in the fluid. The three curves Nos. 1, 2 and 3 indicate the rate of heating for the following:

Curve No. 1—2 oz. thick glass bottle, containing 1 oz. procaine

Curve No. 2—1000 cc. flask containing 750 cc. salt solution

Curve No. 3—2000 cc. flask containing 1500 cc. salt solution.

The period of exposure is definitely not in direct ratio to the quantity of fluid nor to the capacity of the flask. It cannot be calculated in this way. The relation is established proportional to the area of the container exposed to the heating effect of the steam, per unit of volume of the fluid.

Period of Exposure Determined by Size of Flasks

It is obvious that each solution load must be made up of containers of uniform size and now we approach another angle which needs to be cleared up. The period of exposure, assuming that the load is made up of units of the same size, will be identical whether the sterilizer contains one flask or some larger number. If the load is heavy, the time required to build up to this sterilizing range as indicated by the thermometer will be greater, but the actual exposure after this range has been attained, will be just the same.

Correct Exposure Periods for Various Sizes of Flasks

The following data has been prepared to show the correct exposure periods for various sizes of thin glass Florence pattern flasks illustrated by Figure No. 2, commonly used for solution sterilization. This data is the

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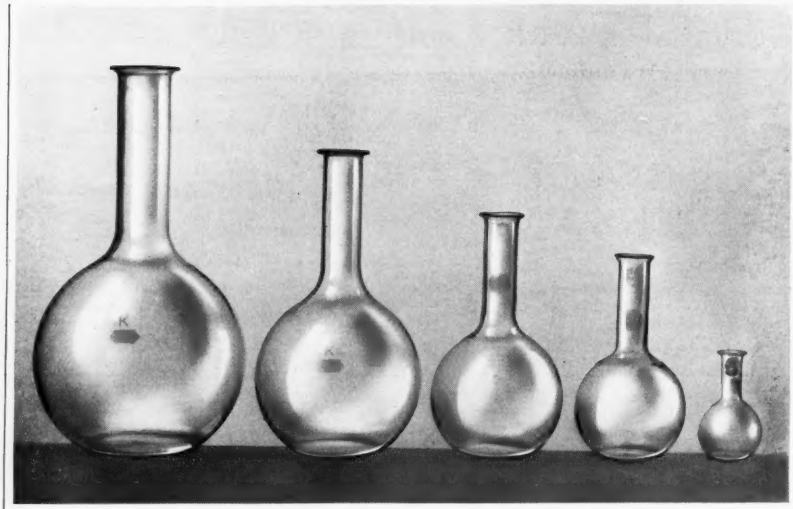

Typical Florence flasks commonly used for solution sterilization.

result of carefully conducted potentiometer tests and temperature curves as developed in Figure No. 1. In each case the container was filled to about three-quarters of its capacity.

2000 cc. flask—Exposure period 20 minutes
1500 cc. flask—Exposure period 15 minutes
1000 cc. flask—Exposure period 15 minutes
500 cc. flask—Exposure period 12 minutes
250 cc. flask—Exposure period 8 minutes
125 cc. flask—Exposure period 8 minutes
50 cc. flask—Exposure period 6 minutes
2 oz. ordinary straight sided thick glass bottles commonly used for procaine—Exposure period 8 minutes

It must be understood that except for the last item, this data applies entirely to thin glass flasks. If heavier glass is used the time required for absorption of heat through the glass will be materially increased.

Regulation of Sterilizer

To set up standards of sterilization which can be followed safely necessitates other standards with respect to the use of the sterilizer. For all surgical processes, regardless of what the load may be—dry goods, fluids or instruments—there are many excellent reasons for maintenance of the same maximum operating temperature. There is no practical reason for changing the sterilizer regulation with respect to pressure and temperature. Much investigative work indicates that this range should be 250 to 254° F. corresponding to pure steam at 15 to 17 pounds pressure. It is usually not practicable to attempt closer automatic regulation, nor is it greatly desirable.

Definition of "Period of Exposure"

With regulation established, it is necessary to define exactly what is meant by "period of exposure." When steam is turned to the chamber for sterilizing, temperature as shown by the thermometer will advance, with the initial rapid discharge of air, at a rapid and uniform rate to about 240° F. Then the rate of advance will slow down materially, at an increasingly slower rate, until the maximum temperature is attained.

When the thermometer indicates 240° F., the temperature of the steam surrounding the load will be several degrees higher, close to 250° F. This is a natural and to be expected lag accounted for in the action of the thermostatic valve which controls the chamber discharge. But, knowing that this lag does exist, it must be taken into consideration, particularly in sterilizing heat sensitive fluids where any degree of over-exposure may be critical. It means that when the thermometer indicates 240° F., the load is being subjected to nearly the full sterilizing influence of the steam and in this respect it is well to bear in mind that measurable sterilizing effect begins at temperature far below 250° F. Anson Hoyt, Albert I. Chaney and Korine Cavell outline this fact clearly in the December, 1938, *Journal of Bacteriology*. It is indicated that the resistant pathogenic organisms such as spores of C. oedematiens, C. Welchii and C. tetani are destroyed in direct contact with steam in one minute at 250° F., in

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four minutes at 240° F. and in ten minutes at 230° F. In the sterilization of aqueous solutions, the margin of safety is greater than in direct steam because of the super-abundance of moisture, a factor which facilitates sterilization definitely.

This will explain why we define "period of exposure" as beginning when the thermometer indicates 240° F. and continuing for the specified length of time during which the thermometer will slowly advance to the maximum of 250 to 254° F.

To Cool Solutions Following Sterilization

Rapid exhaust of pressure from the sterilizer will surely cause violent ebullition of the fluid which will result in blown stoppers and an undue loss of fluid. At the best, under most careful regulation of exhaust, there will be a loss of about 3 per cent which cannot be avoided. Some institutions provide an extra 5 per cent of distilled water in making up solutions to cover this expected loss by evaporation, leaving the fluid finally, of very close to the concentration intended.

On the other hand, the practice of permitting the entire sterilizer to cool down slowly after solution sterilization literally prolongs the period of exposure to sterilizing influence, and in the case of heat sensitive fluids such as procaine, the additional exposure may cause discoloration.

The most satisfactory method calls for some skill and care in regulation of the exhaust, as follows: At the close of the period of exposure, turn off all heat, close the valve admitting steam to the chamber, and then adjust the exhaust valve from the chamber very slightly open to a degree that will permit exhaust of pressure to zero in not less than 7 to 10 minutes. Under this method, the fluid can exhaust its heat without too violent ebullition, at the same rate at which the pressure is reduced. This method has been followed successfully for many years by some of our largest institutions, and it is recommended.

Changes in Nursing Personnel

E. MARGARET FROST, for several years assistant superintendent of nursing at Newport Hospital, Newport, R. I., has been named superintendent of nurses at Memorial Hospital, Pawtucket, R. I., succeeding MADELEINE M. SCHROEDER, who resigned.

MARGARET TALIAFERO, for the past nine years superintendent of nurses at Raleigh General Hospital, Beckley, W. Va., has resigned.

MRS. L. E. ROSENBLAD, assistant director of nurses at the Brackenridge Hospital, Austin, Tex., has resigned to become superintendent of nurses of the Robert B. Green Memorial Hospital, San Antonio, Tex. She succeeds CATHERINE LAVELLE, resigned.

CHARLOTTE F. LANDT, formerly night superintendent at Cook County Hospital, Chicago, has assumed the duties of executive secretary of the Illinois State Nurses' Association.

Two new appointments on the staff of Nurse Placement Service, Chicago, are FLORENCE ELEANOR SPALDING, who has been appointed vocational assistant in public health nursing, and AMELIA LEINO, who has been named vocational assistant in the hospital and school of nursing department. Miss Spalding succeeds ELIZABETH J. MACKENZIE, who is now the director of the Kings Daughters Visiting Nurse Association, Norfolk, Va.

CONSTANCE MUMFORD has been appointed assistant director of nursing at the M. B. Johnson School of Nursing, Elyria Memorial Hospital, Elyria, Ohio.

FLORENCE E. BOYD has been named the superintendent of nurses at University Medical School Hospital, Little Rock, Ark., succeeding MARGARET RUSH, who resigned last October.

Britain Has Advisory Bureau for Nurses

In an effort to solve the difficulties of the nursing profession in England, and particularly to help in the problem of unemployment, the Royal College of Nursing, London, has opened an advisory bureau.

Much has been heard since the outbreak of the war, says the College, of distress among trained nurses ousted from their posts by nursing auxiliaries; so much so, in fact, that many of those women who were qualifying as auxiliaries wondered, in face of the censure, whether they should continue their training.

This was the very last thing that must be allowed to happen, for, the College points out, the question has resolved itself upon inspection to be one mainly of faulty distribution. The evacuation of the larger hospitals to safety areas has not only slowed down the admission of patients, but has also modified local staffing arrangements.

College area organizers throughout the country are in touch with local staffing needs so that when the nurses come to discuss the problems at headquarters they find there is often quite a choice of posts to suit the qualifications. The College financial secretary advises a course of action with regard to tenancy agreement or insurance policy, the pension expert explains how premiums can be modified, the education department arranges a suitable refresher course in preparation for the change of work.

The main object of the bureau is to gather reliable information on the present situation and contingencies that may arise in the future, and to act as liaison between the public, the employer and the nurse. Experience has shown that the very specialized advice available from this source smoothes out most of the difficulties that crop up.

Refresher Courses

By EMMA M. KOEHLER, R.N.
Central Directory for Registered Nurses, Third District, Missouri State Nurses Association

The program shown below is a sample of that used by the Third District (St. Louis) Missouri State Nurses Association for the fifth annual refresher course, given for the members of the association and nonmembers desiring to attend.

Program

MARCH 6
Pneumonia.....Dr. A. Day
Oxygen Therapy.....Ohio Chemical Co.
MARCH 13
Cardiac Diseases.....Dr. W. Kauntz
Nursing Care.....Miss Martha Rettig
MARCH 20
Chest Surgery.....Dr. J. Mudd
Nursing Care....Sister M. Agnita Claire
MARCH 27
Diabetes.....Dr. W. H. Olmsted
APRIL 3
Orthopedic Surgery.....Dr. T. Brookes
Nursing Care....Miss Mildred McNeilus
APRIL 10
Venereal Diseases.....
....Speaker to be announced

This course of six lectures is outlined each year to cover the type of material which seems to be in greatest demand. The lectures are given by medical staff physicians and surgeons who specialize in the particular subject to be discussed. Likewise, the nursing demonstrations given in connection with the lectures are planned and given by a nursing expert who has had broad experience in this particular field.

The lectures are given twice the same day in order to make the course available to all nurses working at different periods of the day.

There is no fee for the members of the district, but for non-members a nominal fee of 25c per lecture or $1 for the entire course is made. The course is limited to the professional group only.

Constructing a Well-Planned Curriculum For the School of Nursing

By HELEN L. BUNGE

Assistant Professor of Nursing, University of Wisconsin School of Nursing, Madison, Wis.

Curriculum construction is not an unfamiliar field to any nursing instructor. She may not gather all necessary data, retire to a quiet place, and say "I will take this time to prepare my outlines for the fall semester." But any and every person who becomes a part of the teaching faculty in her relationship to students is helping to construct that school's curriculum either by acts of commission or omission. You will agree that the instructor who plans for the future is much more apt to make a significant contribution than one who plans by the day, or perhaps by the hour.

Must Be Joint Project

Curriculum making, then, must necessarily be a joint project carried by all faculty members. The experience will be more meaningful and the results more gratifying if these faculty members are well prepared for the work. "Objective," "content," and "method" are not strange and dull technical terms to be associated with the expert in curriculum construction. They should be a part of the working vocabulary of every instructor. She must extract them sometimes from their settings and often she must redefine them in relation to her own teaching problems.

Although any curriculum is a product of wide joint effort, the general educational policies of a school are largely determined by a small group. It is primarily the responsibility of the school director to interpret these policies to the faculty and to assist them in making specific applications.

Not all faculty members feel able to contribute equally to this project. There are leaders and followers. But it is as important to foster the qualities of an intelligent follower as to encourage sound leadership. It is more important to cultivate a healthy attitude of inquiry than a blind loyalty to any one curriculum pattern. In this same spirit, then, you are invited to challenge any statement made here.

Arrangement of the Curriculum

Let us talk about more specific aspects of our problem. First, the arrangement of the curriculum. Attempting to arrive at a logical division of time between theory and practice is an old problem. The terms are relative and ambiguous at their best. To judge any school merely by the number of hours devoted to each of these is making false assumptions, assumptions as to the quality of both the theory and practice periods. Before passing judgment we must look into the use made of these periods by the student under the guidance of the instructor.

Should the theory be offered in advance of the practical work, at the same time the student is having her block of clinical experience, or after the student has had her ward experience in that particular field? Very ideally it is well to offer the theoretical work while the student is having the practical experience and actually as a part of it. This type of integrated course, though, does not insure sound teaching as there are other important factors. Such an arrangement is not feasible in the small school where there may be but two or three students assigned to even the largest department at any one time. A duplication of classes three or four times throughout the year would be extravagant for so small a group. It would not be logical to expect active cooperation from the medical faculty for that type of program.

The organization of some schools demands that the theory be planned on the semester basis. The nursing school must follow suit if it is associated with an educational institution operating on this plan. In such an organization the theory either precedes, runs concurrently with, or follows the practical experience and is arranged as a separate course. This

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SCHOOL OF NURSING

NEURO-PSYCHIATRY August 1939

Student Jones, Mary Class of 1942 (year of graduation)

	Obs.	Perfmd.	Appr.	Comment
Admission of patient				
depressed patient	✓	✓	✓	
disturbed patient	✓	✓	✓	
care of newly admitted patient				
Personal Hygiene				
Care of hair and nails of unwilling pt.	✓	✓	✓	
Oral hygiene of unwilling patient				
Oral hygiene of patient receiving Mercury or Arsenic preparations				
Cleansing baths	✓	✓	✓	
Feeding and Gavage				
Encouraging patient to take food	✓			
Tube feeding				
-preparation	✓	✓	✓	Esmarch
-assistance with feeding administration	✓	✓	✓	
Gastric aspiration				
-test meal				
-use of histamine				
Special therapies				
Hydrotherapy				
-continuous bath	✓			
-pack, neutral				
-pack, hot	✓			
-pack, cold				
-restraint for pack				
-salt glow				
Occupational therapy				
Simple Sewing	✓	✓	✓	Stuffed Toy
Leather Work	✓	✓	✓	Coin Purse
Games on the Lawn	✓	✓	✓	

An example of the procedure check list which is used as a ward teaching aid at the University of Wisconsin School of Nursing.

type of organization is not necessarily inferior to others. It depends on how the instructor relates the ward experience to the class room teaching.

There may be an actual advantage in arranging a small block of practical experience for the student before starting the class room work in this subject. But the plan cannot be haphazard and the instructor must be given a chance to develop her ward program carefully according to the student's background. In pediatrics, for example, it may be desirable to initiate the student into the department by a week or two of ward experience without concurrent or previous class work. In fact this two weeks' assignment in the care and observation of well children will give the student who has had no such former opportunity a foundation on which to build her later class work. Needless to say, however, this type of arrangement is valuable only when the student receives careful guidance during this ward experience.

On the other hand the ward instructor often prefers the theoretical portion of the course so placed that the student will have finished most of her class work before beginning the related ward experience. The instructor in urological nursing prefers that the student be assigned to her urological ward experience either concurrently with or later than the class room work. Unless the student's program is thus arranged the instructor has to duplicate the teaching materials in class room and ward programs which results in a waste of time for both teacher and student.

The course in operating room technic offers a more outstanding example of this same fact because it is unique in its organization and in the nursing skills to be developed. The value of advance class room teaching is limited at best for the student who has had no past experience on which to base her learning. The class room work can serve only as an introduction in the most general sort of way. Should a student be assigned to the operating room before the beginning of the class work she will have to receive the orientation individually from the instructor in charge. As in the above instance the result is a wasteful use of teaching time.

Distribution of Class Hours

The distribution of class hours within the week and day offers a special problem in a nursing school curriculum. From the standpoint of the student an equitable dispersement of class hours throughout the week proves educationally more valuable than a concentration of all class hours on one or two days of the week. Even though the student is not counted as a real part of the ward nursing service there are few situations in which her presence or absence at certain times of the day does not make some difference in the smooth running of the ward. In general, class instructors and students shy away from the 1:30 and 2:30 hours because of the deadening after dinner lethargy. A regular evening class, particularly after a full day, is also to be deplored. Professional standards for the educational program are almost impossible to attain if the student is expected to spend a total of more than eight hours during any one day on the ward and in the class room. The nursing instructor should be available for teaching any time of the day but the doctor's schedule will have to be planned according to the demands of his outside routines.

In the nursing school connected with a hospital of large segregated services there is a tendency to divide the theoretical portion of the curriculum into small units. It is common in such a school to find different instructors (specialists) for general surgery, urology, gynecology, ortho-

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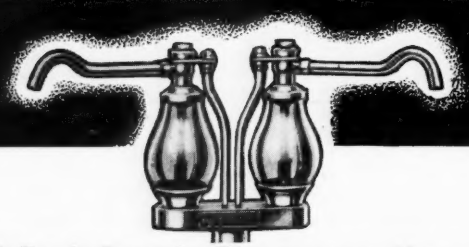

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pedics, and eye, ear, nose, and throat. Each of these instructors is apt to stress the importance of his or her field in the background of the graduate nurse. And the supervisor of theoretical instruction is besieged on all sides by sincere requests from these specialists for increased time allotment. It is very hard for her to differentiate between essentials and non-essentials and very easy to place an undue emphasis on details of relatively questionable importance. In order to avert complicated major operations which become necessary if this unhealthful condition persists and grows, the faculty must periodically sit down in conference and correct the defect in its early stages by redefining actual goals and standards. The process may be time-consuming, but the program is inevitably clarified, simplified, and strengthened.

Other complications arise when the theoretical portion of the curriculum is broken into very small units. Duplication of subject matter is inevitable and the evaluation of the student's achievement is less valid and reliable. The 1937 Curriculum Guide gives a suggestion for combining more thoroughly the medical and surgical nursing courses.[1] Although frequently in a large school it would not be practicable to actually combine medicine and surgery into one course much can be done to approach such a goal. One school allows five definite hours a week throughout the semester for this combined course in general medicine and surgery. It is the privilege of the two general medical and surgical nursing instructors to make a joint outline with the idea of keeping the medical and surgical aspects of any one disease parallel. When the disease is a purely surgical one with no significant medical counterpart the surgical staff uses all of the hours for a week while the medical department stands by, or vice versa. Through this group project the school has eliminated much duplication and has received the interest and cooperation of the doctors involved. However, if classes are postponed a dislocation of the entire program will result.

Value of Advance Preparation

The value of advance preparation cannot be denied. But the class room teacher needs assistance from the supervisor of theoretical instruction. She must be made aware of the general goals and policies of the school, as mentioned before, and also must have information which affects her course more specifically. Just where does her course fit into the whole curriculum pattern? How much time is allowed? For what teaching areas is she specifically responsible? What changes are planned for the ensuing year? How many students will she have? What is their background?

In some schools it is customary for the instructor to audit a number of classes taught by other nursing school teachers with the purpose of familiarizing herself with their content. Much of this time could better be spent in teaching activities since the bulk of this information can be extracted from the detailed course outlines kept on file in the central office. These outlines serve their purpose best if they are organized according to a standard form and if they are subject to yearly revision. They should be easily accessible to all.

An outline is also of inestimable use to the instructor who made it. The more detailed and carefully developed the outline the better organized the course will be. If the outline is due in the office before the first meeting of the class the instructor will, of necessity, give more preliminary thought to her semester's program, and will not fall victim to

1. N.L.N.E.—*Curriculum Guide for Schools of Nursing*, p. 404-437.

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the weakening influences of procrastination. In other words, a more leisurely and thorough advance preparation for a block of classes cuts down appreciably the amount of hurried and sketchy preparation from day to day.

Curriculum Problems of the Ward

Curriculum problems arising on the ward are frequently more perplexing than those related to the class room. It is comparatively easy to outline content for a semester's class and then to carry through this class according to a prearranged schedule. But on the ward the content of the experience must depend upon the kind of patients who are there during the student's term.

To keep a record of the types of diseases cared for does not insure a wide experience. When a student records that she took care of a patient with a decompensated heart or mitral stenosis she is not indicating what nursing care she actually gave the patient. Was he suffering from orthopnea? Was he having a special diet? Was his urinary output being measured? Was he receiving oxygen therapy? Was he being given fluids parenterally?

Likewise, if the student merely records that she took care of a postoperative gastric resection one does not know whether this care was given during the immediately postoperative period or during the convalescent stage. Therefore it is not clear whether that particular patient presented the nursing problems usually associated with a typical postoperative gastric resection.

Meaningful experience records are tedious, time consuming and actually laborious. They are an absolute essential in the hospital with unsegregated services in order that amounts of medical and surgical ward experience can be estimated. In a large general hospital they are of some use to the ward instructor in planning conferences and making daily assignments. But they do not indicate what nursing problems the student is actually encountering. It is important for a nurse to understand the disease process existing in a patient only so long as she sees the relationship between this disease process and the nursing care which is needed as a result of it.

The procedure check list is one of the most valuable ward teaching aids. By looking over this record from day to day the instructor can see at a glance the different types of nursing problems met by the student. To be true, it gives no information concerning the type of disease from which the patient is suffering and therefore cannot serve as the only ward practice record. It is more significant when student assignments are made on the group nursing basis than when they are made on the functional basis. In the former instance the procedures are executed as a part of the total nursing care of the patient rather than as isolated technics.

The accompanying check list is an example of those used at the University of Wisconsin School of Nursing. An entire set of mimeographed sheets is stitched into a manila folder. One of these folders is made up for each student entering the residential portion of the nursing course. The instructor in charge of ward practice takes the folder from one department to another as the student progresses through her clinical program. The ward instructor is responsible for checking the appropriate sheet before the student leaves her department in order that the folder may be kept up to date. The instructor finds it useful to have all departmental check lists together so that she may look them over when the student comes to her department. In this way she procures specific information concerning the student's previous experience.

This sample check list from the neuropsychiatric department tells considerable about the type of problem the student has met there, although it does not specifically state whether her patients were suffering from a manic depressive psychosis, hysteria, or perhaps a brain tumor. The informed reader does know that neuropsychiatric patients exhibit certain typical behavior patterns. In looking at the sheet she is able to recognize certain of these patterns by the nursing procedures which have been checked.

Group Nursing Method Advantageous

As has already been intimated, the group nursing method of assignment is more advantageous for the patient and the student than the functional method. The patient feels a certain security in knowing who is responsible for her program of nursing care and the student can see the entire picture of the patients for whom she is caring. The student's observations need not be limited to the three or four assigned patients. If she is working in a large ward she literally cannot fail to observe the patients located near those assigned to her. Opportunities for extending her clinical experience beyond the confines of her assigned patients' units are countless.

Ward teaching methods cannot be simply catalogued and evaluated. There are too many variables which determine the effectiveness of each type. Although the instructor teaching on an unsegregated service has more difficulty in keeping the necessary records of student experience she has the opportunity of offering the student both the medical and surgical care of a patient in proper sequence.

Individual instruction is the hub around which all other parts of the ward teaching program revolve. There is no satisfactory substitute for it. The clinical part of the curriculum furnishes an ideal setting for the spontaneous, incidental teaching which develops in response to a need felt by the student or group of students at a particular time. The written nursing care study and topics are valuable when used in moderation but are poor substitutes for the informal teaching methods which provide an easy exchange of ideas between student and teacher. An undue amount of emphasis upon written work may result from lack of time on the part of the instructor or perhaps hesitancy on her part to develop comparatively unfamiliar teaching methods. The written nursing care study used injudiciously prompts the student to concentrate most of her attention on this particular "case" thereby minimizing the importance of a full program of nursing care, based on adequate study, for each of her assigned patients. Frequent oral reports on patient studies are not only less time-consuming but can easily be used as a basis for informal student conferences. These weekly or daily conferences will follow the prearranged general ward program outlines but must vary in number and content with the requirements of different student groups.

These are but a few of the curriculum problems which the instructor is continually meeting. There are no easy solutions to them and the instructor's work is never done. She can make an attempt to contribute significantly to the field of curriculum construction by inviting that self confidence which comes from a well-rounded preparation along academic and professional lines; by testing her courage to strive actively toward carefully defined teaching goals; and by proving her ability to grow in response to the demands of a changing environment.

New Appointment at Masonic

Catherine Harris, R.N., has been appointed superintendent of nurses at Masonic Hospital, El Paso, Tex.

Food and Dietary Service

EDITORIAL DIRECTOR: Mary Edna Golder, Dietitian, St. Anne's Hospital, Chicago.

Federal Meat Grading Service Available to Hospitals

By W. O. FRASER
Principal Marketing Specialist, Agricultural Marketing Service, U. S. Department of Agriculture

Purchasing agents of hospitals and other public institutions are continually confronted with the problem of buying meat of uniform quality. That problem is largely solved when Government grades are specified. The Federal meat grading service has enabled institutions buying meat on the basis of contract awards to get consistently the grade of meat desired at the lowest price obtainable.

The use of U. S. official standards by these institutions is optional. They may state their specifications in terms of their own requirements. However, certain Government purchases, such as for Veterans' hospitals, are required to be based on the U. S. official standards. And a number of states require that the meats purchased for their institutions be based on U. S. official standards.

The U. S. official standards for meat, as now used by the U. S. Department of Agriculture, are based upon visible characteristics of the product. In general, the official standards are defined in such a way that the highest grade in a set of standards includes all of the characteristics that make for palatability, while the lower grades include less desirable features. This principal, of course, is fundamental to any food grading system.

The grading is done by trained Government meat experts. From long experience these men are able to examine a dressed carcass or cut of meat and determine its relative position on the quality scale. Once the grade is determined, the grade name is placed upon the carcass with a roller stamp in such a way that the stamp appears on the principal cuts. The stamping is done with a harmless vegetable compound which usually disappears during cooking.

The use of the Federal meat grading service is not confined to large-quantity purchases. With the grade name stamped on the meat, consumers are able to identify easily the quality handled by their butcher. Consumers have always insisted on the right to know what they were buying, but quite frequently, through lack of experience, the quality of meat was difficult to determine. To consumers, the meat grading service offered a solution to this problem and interest in the grading work has become widespread. Surprisingly enough, many homemakers of the lower income groups are buying meat by grade, probably because they feel quality is being assured.

Hotels, restaurants, steamships, and railroad dining cars are also extensive users of the service. They have found that customers tend to judge the merits of the dining room by the quality of the meat served. The uniformity of graded meat eliminates most of the causes of customer dissatisfaction and greatly simplifies the purchasing problem.

Beef Shows Wide Range of Quality

The Government grades all kinds of meats. But the grading of beef has been stressed more than that of other meats because beef shows such an extreme range of quality. In other words, the purchaser of pork, veal, or lamb has a better chance of obtaining good quality than the purchaser of beef, because a relatively large percentage of the production of these meats is of the higher grades. As the standards for all kinds of meats are based on the same grade characteristics, and because purchasers are particularly interested in the beef grades, a discussion of the beef standards tends to clarify the entire subject of meat grading.

The Government standards provide for the grading of beef produced from steers, heifers, and cows on its characteristics as beef alone. Beef placed within each respective grade possesses the characteristics specified for that grade, regardless of the sex of the animal from which it was derived. The various characteristics that are used in determining the grade fall into three main categories: quality, finish, and conformation. The grade is determined on the basis of a composite evaluation of these three factors.

Three Grade Factors Considered

Quality, in the sense of a grade factor, is indicated by the color, texture, grain, and degree of marbling. It is considered to be the most important of the three grade factors because it furnishes the most dependable criterion for determining the relative merit of beef.

Finish is determined by the quantity, color, character and distribution of fat. The principal significance of finish is that it is rather closely related to the quality of the beef and therefore provides a dependable guide as to its relative merit.

Conformation includes the general build of the carcass, side, or cut. Its chief significance in grading is the close relationship that exists between conformation and the proportion of edible meat to bone.

All meats possess each of the char-

(*Continued on page* 48)

. . . KITCHEN
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for the ARCHITECT

Good engineering is the very foundation of the kitchen. Kitchen equipment handles the most delicate and perishable of all commodities — food. It is therefore essential that the equipment be designed, built and arranged for sanitation, performance and permanence.

This is a responsibility for the specialist. For more than half a century the John Van Range Company has maintained a staff of kitchen engineers whose only function is to render specialized assistance to architects responsible for planning modern facilities for the preparation and serving of food for hosiptals and public institutions.

The kitchen, illustrated above, was planned, designed and equipped by the John Van Range Company, working in cooperation with the architects and administrative authorities. Similar installations by Van engineers are to be found in scores of leading hospitals and institutions.

The services of John Van kitchen engineers are available, without charge or obligation, to all architects having food service problems on their boards. Have you such a problem?

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Spices in Hospital Dietetics

By AMY VANDERBILT

The subject of nutrition not so very long ago was so coldly scientific that "appetite appeal" was often overlooked. We know that food to be most beneficial must be, at the same time, appetizing and flavorful. The modern hospital's dietitian avoids the tasteless, anaemic dishes that were once traditional institutional fare. Unseasoned, bland foods are, naturally, called for on certain diets, but for cases in which such special ordering need not figure, the flavor and appearance of foods placed before the patient are of prime importance.

The American Spice Trade Association has been receiving a great many queries concerning spice cookery direct from the dietetics divisions of leading hospitals. Complaints about hospital fare, say dietitians, come mainly from attending physicians, who feel that the general daily menus could be improved and with them, the patients' appetites. Variety and presentation of food counts high in the battle to tempt the patient to eat the food he needs. Set weekly menus are unappetizing, too. Patients do not wish to know that each Friday noon will bring vanilla ice cream and each Sunday night's supper cold ham and potato salad. The surprise element keeps meals interesting.

A tremendous change has come in our knowledge of herbs and spices. As every student of food knows, all sorts of things we now consider vital vegetables were, prior to 1800, not eaten as vegetables, but were considered herbs or flavoring agents alone. Vegetables like carrots, lettuce, celery and even the cabbage family were all known as herbs. Up until the 19th century, tomatoes, now a staple, were considered poison and were called "love apples."

Spices, as we know them today, consist of herbs, seeds, roots, barks and berries. Herbs, strictly speaking, are all plants that bear soft seeds. Actually, then, all vegetables are herbs. Those that are used strictly for flavoring or garnishing, though, we consider herbs. But herbs, generically, are spices too.

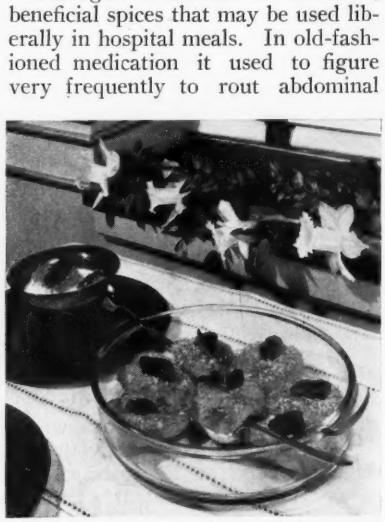
We are not used to thinking of the possible vitamin content of a spice, yet many spices are distinctly useful in nutrition. Paprika, the mild Hungarian variety, is one of the best sources of vitamin C, better even than citrus fruits. A Hungarian scientist recently secured a Nobel Prize for this discovery alone. Hungarian paprika is so mild it may be used in relatively huge quantities without imparting a "bite" to food. It is one of the mildest of flavorings. It may be added in sufficient quantity to give a rosy tint to such foods as cream or cottage cheese, mayonnaise, or whipped cream (for soup or salad garnishing). Consommé on low calorie diets may be brightened by a fresh lemon slice dipped in paprika for color, flavor and added vitamin C.

Paprika, too, contains the less known vitamin P, used in the treatment of haemophilia.

In cookery, paprika lends a bright dash of color and an enticing flavor to pale foods such as chicken á la king, creamed sweetbreads, canned or fresh corn, cauliflower and cream soups.

Tarragon is another of the mild, beneficial spices that may be used liberally in hospital meals. In old-fashioned medication it used to figure very frequently to rout abdominal

Poppy Seed Cake



Crisp Spiced Pears

gas. The great Arab doctor Elbeithar mentioned it for this complaint as early as the 13th century, but it was not until two centuries later that tarragon found its way into the kitchen. Dyspeptics still derive benefit from tarragon although it no longer figures in doctors' prescriptions for, like other spices, tarragon stimulates the appetite. Because it is completely non-irritating, tarragon is one of the spices that may be used safely even on the alkaline diet.

Every hospital attendant knows the medical value of thymol, used in most cough medicines. Thymol comes from our culinary herb, thyme. The current excitement over vitamin B is, then, based on a fragrant herb that to most of us means a flavoring for stuffings. You might remember thyme in connection with roast lamb, a dish that inclines to grow too familiar to hospital patients. Powdered thyme is also a delicious flavoring for vegetable juice cocktails and thyme added to vinegars for tasty salads, just as is tarragon, means variety in foods that are needed for convalescents.

Thyme does duty with that other rather insipid meat, veal. A famous French dish is Blanquette de Veau. Its delicate flavor is greatly dependent on the suspicion of thyme in the *bouquet garni*. It is made from veal shoulder (an economy cut) skinned and cut in one inch cubes. It is simmered with the bone and trimmings and the *bouquet garni* which consists of a bayleaf, thyme and parsley. The parsley holds the other two herbs in place and the whole is tied with thread and removed before the bouillon is thickened. A carrot or two, a few black peppercorns, a couple of cloves and an onion belong in the liquor. The Blanquette, with its gravy strained and thickened (I like to use arrowroot) is served over rice with a bright vegetable such as peas, carrots, beets or spinach for color contrast.

The best cooks often complain that it is most difficult to plan attractive desserts. Again spices help. Gingerbread served with softened cream cheese, whipped cream or a cube of American cheese, perks up interest. Old-fashioned Indian pudding helps egg and milk forced feeding. The delicious seeds, caraway, poppyseed, sesame, cardamon and anise are bread and dessert possibilities. Home made pound cake seasoned with the delicate mace and fortified with iron-rich raisins is particularly appealing to children.

A nutritious convalescent beverage is made with fresh orange juice beaten up with a raw egg until it foams.

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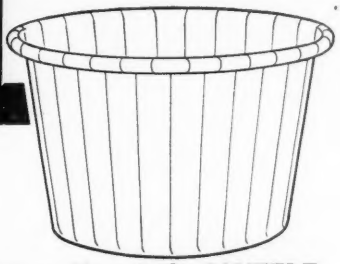

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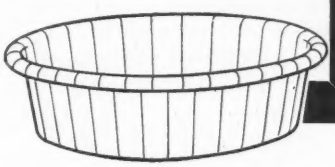

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Fresh nutmeg is shaken over the top as in an eggnog.

Spices, for hospitals as well as for homes, should be purchased in small lots and used up quickly, as they are mainly dependent on their aroma for their flavor-giving quality. Air is the thief of the goodness of spice. All ground spices should be used within six months of their purchase, or be discarded. Unground spices such as whole black pepper, allspice, whole nutmeg, cinnamon sticks, cloves and mace have a longer flavor life but, like ground spices, should be kept in air-tight containers with their sifter tops closed when not in use.

Hospital dietitians are invited to write to the American Spice Trade Association for "Season to Taste," the association's recipe booklet, or may receive the monthly recipe sheet and spice information from the association free of charge.

Poppy Seed Cake

½ cup poppy seed
1 cup milk
½ cup butter
1½ cups granulated sugar
⅛ teaspoon salt
½ teaspoon powdered mace
2 cups flour
2 teaspoons baking powder
4 stiffly beaten egg whites

Bruise the poppy seeds in a mortar or chop them gently in a chopping bowl, then soak in milk (aside from the quantity mentioned) for an hour. Cream the butter and sugar until white, then add the poppy seed and the mace. Add the sifted dry ingredients and the milk. Fold in the egg white and pour into a greased oblong cake pan. Bake one hour in moderate oven (350° F.). Cool and sprinkle with confectioners' sugar.

Crisp Spiced Pears

1½ cups cornflakes
1 teaspoon nutmeg
½ cup brown sugar
3½ cups pears (1 No. 2½ can)
2 tablespoons lemon juice
⅓ cup pear juice
mint leaves

1. Crush cornflakes with a rolling pin. Add nutmeg and sugar; mix thoroughly.
2. Drain juice from pears, saving ⅓ cup. Dip pears first in lemon juice, then in cornflakes mixture. Place pears in a heat resistant glass layer cake dish.
3. Pour ⅓ cup pear juice into dish, and bake in a moderately hot oven, 375° F., about 25 minutes or until lightly browned.

Garnish with mint leaves and serve hot with cream.

Time: about 25 minutes; temperature: moderately hot oven, 375° F.; Amount: 5 to 6 servings.

Federal Meat Grading Service

(*Continued from page* 45)

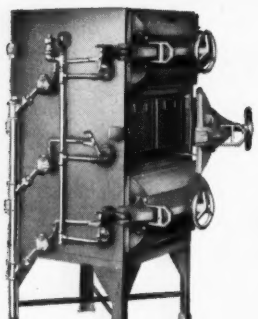
acteristics to a varying degree. A range of variation with respect to each is included within each grade and the final grade determination of a given carcass or cut is based upon a composite evaluation of these three factors by the grader.

The Beef Grades

The grades of carcass beef and wholesale cuts are: Prime, Choice, Good, Commercial, Utility, Cutter and Canner, in the order of their relative desirability.

Prime is the highest grade of beef obtainable. It is available only in limited quantities, usually during the late fall and the winter months following livestock shows. The cuts are somewhat uneconomical as the removal of excess fat is necessary before cooking, but loins and ribs of this grade are in demand for exclusive hotels, restaurants and clubs. *Prime* beef is produced exclusively from steers and heifers that represent a close approach to perfection in breeding, and which have been specially fed for a long period.

Choice is the highest grade of beef available regularly throughout the



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year in the Middle West and East, and is usually available in limited quantities in the West. The cuts are usually fat and may require considerable trimming. *Choice* grade beef is produced from steers and heifers that have been intensively fed for a relatively long period on concentrated feed.

Good is the highest grade of beef available from coast to coast throughout the year. *Good* grade beef is produced very largely from steers and heifers that have been fed intensively on concentrated feed for varying lengths of time and carries enough fat for the average consumer.

Commercial grade beef constitutes a relatively large percentage of production. This grade of beef is produced from steers, heifers, and young cows. It is of fairly good quality, and carries little excess fat. The live animals are usually either grass-fed or have been intensively fed only a short time on concentrated feed.

Utility grade beef is suitable for sale as carcass beef and when properly cooked may be used for practically any purpose except broiling or roasting. *Utility* grade beef is produced from steers and heifers that have been fed either largely or entirely on grass or roughage, and from cows that are young and well-fattened enough to be suitable for "block" beef. Although *Utility* grade beef does not possess the flavor or tenderness of the higher grades it is much superior to that produced from the *Cutter* and *Canner* grades which are not usually stamped.

Cutter and *Canner* grade beef is seldom used for "block" beef, that is, beef sold as retail cuts. So it is necessary for consumers to become familiar with the names and characteristics of only the first five grades of beef.

The Federal grading service is now available in the principal packing centers and at a number of the larger wholesale markets. Graded meats can, therefore, be obtained by practically any wholesaler, jobber, or hotel supply house whose customers demand Federally graded meats. Ordinarily the graded meats cost only a few cents more per hundred weight than ungraded meats of similar quality. The extra cost is more than offset by the ease and economy in purchasing,and the advantage of uniform quality.

Chatterbox Topics

In reading over John Ebersole's article, "Forty Ways to Cut Food Costs," in the February, 1940, issue of "American Restaurant Magazine," I thought these selected notations worth remembering:

"1. Remember—nobody ever regretted buying quality merchandise.

"2. Good menu-planning eliminates left-overs.

"3. The value of having standardized portions and properly educating employees to serve them.

"4. Use seasonable merchandise.

"5. If you use much ice cream investigate the advantage and saving in making your own.

"6. Weigh all out-going garbage and check it carefully for throwaways.

"7. The use of ounce scales in all departments.

"8. Buying by specification reduces waste.

"9. The value of thermostats not only in cooking but also in keeping food properly to prevent waste."

•

Do you like wall charts? The American Restaurant Institute offers a set of four blue prints for mounting adjacent to the buyer's desk. The charts are 17 x 22 inches and pertain to "Standard Fruit Sizes," "Standard Meat Trims," "Standard Vegetable Sizes," and "Beef Money Cuts Mean Profits or Loss."

★ **If you could make a check of your patients' pantry shelves, you'd see that when your patients make their own choice of cereals — the majority choose *Kellogg's!***

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GENERAL MENUS FOR SEPTEMBER

Suitable for Staff, Personnel and Patients Not Requiring Special Diets

DAY	Breakfast	Dinner	Luncheon
1.	Melon; Cold Cereal; Scrambled Eggs; Toast	Roast Lamb with Mint Jelly; Parslied Potatoes; New Peas; Waldorf Salad; Raspberry Shortcake	Creamed Chipped Beef on Toast; Mixed Fruit Salad; Chocolate Sundae; Cookies
2.	Stewed Apricots; Cold Cereal; 3-Minute Egg; Toast	Baked Ham; Escalloped Potatoes; Buttered Wax Beans; Fresh Fruit Salad; Chocolate Marshmallow Roll	Italian Spaghetti; Mixed Green Vegetable Salad; Butterscotch Sundae; Cookies
3.	Pineapple Juice; Cold Cereal; French Toast; Bacon	Broiled Liver; Creamed Potatoes; Mashed Squash; Combination Salad; Fresh Peach Shortcake	Escalloped Corn and Tomatoes; Deviled Eggs; Pear and Cottage Cheese Salad; Coconut Cake
4.	Orange Halves; Hot Cereal; Poached Eggs; Toast	Beef Pot-Pie; Mashed Potatoes; Asparagus; Lettuce with French Dressing; Blueberry Cup Cakes	Ham Salad Sandwiches; Cabbage and Beet Salad; Fudge Squares; Ice Cream
5.	Grapefruit; Cold Cereal; Sausage; Toast	Salisbury Steak; Boiled Potatoes; Corn on Cob; Gelatin Vegetable Salad; Cream Puffs a la Mode	Toasted Tomato and Cheese Sandwich; Fruit Salad in Gelatin; Ice Cream; Cake
6.	Orange Juice; Hot Cereal; Bacon; Cinnamon Toast	Salmon a la King; Baked Potatoes; Peas and Carrots; Apple-Date Salad; Blackberry Cobbler	Cheese Omelet; Peas and Carrots; Lettuce with 1,000 Island Dressing; Chocolate Pudding
7.	Tomato Juice; Hot Cereal; Sausages; Muffins	Meat Loaf; Mashed Potatoes; Stewed Tomatoes; Mixed Vegetable Salad; Chocolate Layer Cake	Escalloped Chicken with Noodles; Broccoli with Hollandaise Sauce; Sliced Tomatoes; Fresh Fruit Cup
8.	Cantaloupe; Cold Cereal; 3-Minute Egg; Toast	Roast Chicken; Mashed Potatoes; Buttered Green Beans; Melon Ball Salad; Caramel Sundae	Hot Roast Beef Sandwiches; Waldorf Salad; Butterscotch Sundae; Cookies
9.	Grapefruit Sections; Hot Cereal; French Toast; Sausages	Corned Beef Hash; Parslied Potatoes; Buttered Spinach; Relish Plate; Floating Island	Broiled Liver and Bacon; French Fried Potatoes; Salad Bowl; Fruit in Gelatin
10.	Stewed Prunes; Cold Cereal; Poached Egg; Toast	Veal Chops; Potatoes au Gratin; Broiled Tomatoes; Cole Slaw; Mixed Fresh Fruit	Hamburgers on Buns; Hot Potato Salad; Combination Salad; Peach Brown Betty
11.	Orange Slices; Hot Cereal; Scrambled Eggs; Toast	Swiss Steak; Cream Gravy; Mashed Potatoes; Buttered Green Beans; Lettuce with Roquefort Dressing; Cottage Pudding with Fruit Sauce	Cream of Tomato Soup; Rice and Veal Casserole; Pear-and-Cottage Cheese Salad; Melon Balls
12.	Sliced Fresh Peaches; Cold Cereal; Bacon; Muffins	Boiled Beef; Noodles; Frosted Asparagus; Combination Salad; Chocolate Pudding	Baked Macaroni and Cheese; Mixed Fruit Salad; Pineapple Upside-Down Cake
13.	Rhubarb; Hot Cereal; 3-Minute Egg; Toast	Baked Fish, Spanish Sauce; Baked Potatoes; Buttered Spinach; Pear-Cottage Cheese Salad; Date Pudding	Cream of Mushroom Soup; Shrimp Salad; Relishes; Fresh Fruit Plate; Wafers
14.	Orange Juice; Wheat Cakes, Syrup	Italian Spaghetti; Meat Balls; Combination Salad; Devil's Food Cake a la Mode	Cold Meats; Potato Chips; Kidney Bean Salad; Peach Tapioca
15.	Crushed Pineapple and Sliced Bananas; Hot Cereal; Poached Egg; Toast	Roast Beef; Oven-Browned Potatoes; Carrots and Onions; Pickled Beet Salad; Gingerbread with Whipped Cream	Jellied Veal Loaf; Escalloped Potatoes; Sliced Tomatoes; Ice Cream; Cake
16.	Melon; Cold Cereal; Creamed Eggs on Toast	Lamb Chops; Parslied Potatoes; Buttered Peas; Prune-Pineapple Salad; Apple Cobbler	Omelet; Grilled Tomatoes; Cole Slaw; Angel Food Cake; Ice Cream
17.	Pineapple and Orange Juice; Cold Cereal; Scrambled Eggs; Muffins.	Shepherd's Pie; Cauliflower; Tomato Aspic Salad; Fresh Peach Shortcake	Tomatoes Stuffed with Tuna Fish Salad; Potato Salad; Fresh Fruit Plate; Cookies
18.	Applesauce; Hot Cereal; 3-Minute Egg; Toast	Boiled Tongue; Raisin Sauce; Mashed Potatoes; Buttered Squash; Tomato-Cottage Cheese Salad; Melon Balls	Creamed Chipped Beef on Toast; Waldorf Salad; Raspberry Shortcake
19.	Orange Slices; Hot Cereal; Broiled Bacon; Coffeecake.	Meat Loaf; Creamed Potatoes; Corn on Cob; Celery Hearts and Radishes; Fresh Raspberry Sundae	Bacon and Tomato Sandwiches; Pickled Beet Salad; Fresh Fruit Tapioca
20.	Figs; Cold Cereal; Cinnamon Raisin Toast	Salmon and Corn Souffle; Broiled Tomatoes; Mixed Fruit Salad; Cherry Tarts	Tuna Fish Salad; Potato Chips; Creamed Peas; Chocolate Cup Cake a la Mode
21.	Grapefruit Juice; Hot Cereal; Poached Egg on Toast	Salisbury Steak; Parslied Potatoes; Buttered Asparagus; Sliced Tomatoes; Watermelon	Vegetable Soup; Ham Sandwiches; Pickled Beet Salad; Fresh Fruit Tapioca
22.	Stewed Prunes; Hot Cereal; Canadian Bacon; Toast	Fried Chicken; Mashed Potatoes; Creamed Cauliflower; Buttered Peas; Princess Salad; Lemon Sherbet	Cold Roast Beef, Hot Potato Salad; Sliced Tomatoes; Baked Apple with Cream
23.	Orange Juice; Cold Cereal; 3-Minute Egg; Toast	Broiled Veal Steak; Browned Potatoes; Buttered Carrots; Lettuce with 1,000 Island Dressing; Fruit Compote	Salmon Patties; Creamed Potatoes; Mixed Fruit Salad; Cup Cakes
24.	Honey Dew Melon; Hot Cereal; French Toast; Broiled Bacon	Baked Ham, Raisin Sauce; Candied Sweet Potatoes; Buttered Spinach; Mixed Fruit Salad; Ice Cream	Bar-B-Q-Beef Sandwiches; Combination Salad; Apple Tart
25.	Stewed Apricots; Cold Cereal; 3-Minute Egg; Toast	Braised Liver; Creamed Potatoes; Broiled Tomatoes; Melon Ball Salad; Cheesecake	Vegetable Chowder; Stuffed Green Pepper; Hot Slaw; Sliced Peaches; Marble Cup Cakes
26.	Orange Halves; Hot Cereal; Bacon; Toast	Lamb Chops; Parslied Potato Balls; Creamed Peas; Banana-Pineapple Salad; Peach Ice Cream	Frosted Asparagus; Baked Potato; Cottage Cheese with Stuffed Olives; Jelly Roll
27.	Grapefruit Sections; Cold Cereal; French Toast; Jam	Broiled White Fish, Tartar Sauce; Whipped Potatoes; Stewed Tomatoes; Apricot and Cottage Cheese Salad; Pineapple Sherbet	Omelet; Broiled Tomatoes; Mixed Fruit Salad; Fudge Squares
28.	Tomato Juice; Hot Cereal; Sausages; Muffins.	Veal Birds; Baked Potatoes; Creamed Cauliflower; Pear and Endive Salad; Caramel Bavarian Cream	Cold Meats; Potato Salad; Sliced Tomatoes; Raspberry Shortcake
29.	Sliced Bananas; Cold Cereal; Poached Egg; Toast	Chicken a la Maryland; Duchesse Potatoes; Buttered Carrots; Apple and Date Salad; Peppermint Stick Ice Cream	Roast Beef Hash; Green Beans; Lettuce with French Dressing; Cheesecake
30.	Orange Juice; Fried Mush; Syrup; Bacon	Meat Loaf; Escalloped Potatoes; Corn on Cob; Cucumber-Radish Salad; Cherry Cobbler	Lamb Patties; French Fried Potatoes; Creamed Peas; Melon Balls

Housekeeping and Maintenance

How Science and Research Combine to Perfect Modern Laundry Service

The Housekeeping and Maintenance Department is conducted with the assistance of Mrs. Mildred G. Page, Executive Housekeeper of Henrotin Hospital, Chicago; David Patterson, Chief Engineer of West Suburban Hospital, Oak Park, Ill., and the Institutional Laundry Managers' Association of Illinois.

To many otherwise well-informed persons, modern professional laundry service is still simply a matter of washing, ironing and returning to their rightful owners the clothing and linens which are sent to the laundry for removal of soil.

However, to those who are better acquainted with the scientific development in the laundry industry—and particularly those who have visited this industry's research headquarters, the American Institute of Laundering—the modern laundry stands as a shining example of industrial progress.

Thousands of visitors from all parts of the globe are received each year at this unique research center. A group which recently inspected this world-famous Institute included representatives of the Institutional Laundry Managers Association of Illinois. Included in this group were the following laundry representatives of hospitals and other institutions in northern Illinois: L. H. Hein, Y.M.C.A. Laundry, Chicago, and president of the Institutional Laundry Managers Association of Illinois; L. K. Sutton, U. S. Veterans Hospital, North Chicago; R. H. Bridges, Evanston Hospital, Evanston; Thomas Barry, Elmhurst Hospital, Elmhurst; H. K. Raney, Chicago Lying-in Hospital, Chicago; T. C. Dugger, Chicago State Hospital, Chicago; Charles Page, Henrotin Hospital, Chicago; A. J. Ulrich, Children's Memorial Hosptial, Chicago; R. F. Davis, Chicago Athletic Association, Chicago; Jack Gillette, Mt. Sinai Hospital, Chicago; and G. Day, Augustana Hospital, Chicago.

The American Institute of Laundering, a $500,000 corporation, is located in Joliet, Ill., 40 miles west of Chicago. It was established some 20 years ago as an outgrowth of the Laundryowners National Association of the United States and Canada, and serves as the research headquarters and national association for more than 2,500 laundries, including many in hospitals, hotels, colleges, and other institutions.

As the official "proving and improving ground" of the laundry industry, this Institute not only maintains completely equipped testing and research laboratories, but also includes five technical "service departments" manned by experts in laundry production and engineering problems, textiles and washroom procedure, laundry accounting, sales promotion, advertising and publicity; a School of Laundry Management which offers a 40-week course of practical training in all phases of the laundry business, and a complete professional laundry unit which serves the homes of Joliet.

As an integral part of the School of Laundry Management, there is a smaller fully equipped "student laundry" in which students receive thorough instruction in all phases of actual plant production. The Institute school has achieved world recognition, and students have come from points as distant as England, Denmark, Netherlands, South Africa and Australia, to receive this instruction.

One of the most interesting phases of the Institute's program of service is its function as research and testing laboratory for the laundry industry and for A.I.L. members as individuals.

This research service forms the basis for special reports and service bulletins on problems of interest to the industry as a whole and likewise for answers to special inquiries on individual laundry problems of plant production, operation, and management. Each year some 20,000 special inquiries from Institute members are handled by the A.I.L. technical staff, and hundreds of personal consultations are held at the Institute's headquarters in Joliet. Such problems as proper layout of equipment for most

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efficient production, accurate identification of various types of textiles for best laundering results, sources of damage to fabrics and garments while in use (damage often erroneously charged to the laundry), and grading of laundered articles for whiteness retention and strength loss, are typical of the inquiries regularly handled by Institute technicians.

Functions of the American Institute of Laundering which are of particular benefit to hospital and other institutional laundry members are those carried forward by the Department of Research and Textiles and the Department of Engineering.

The services of the research department include consultation on all problems encountered in the washroom, and the most recent developments and recommendations in improved washroom practice are brought to the attention of laundry members. The "test bundle" service offered by this department gives laundries the opportunity of having their work scientifically checked for quality. Test pieces furnished by the Institute are laundered 20 times in the member plant, and are then returned to the laboratory for grading on whiteness retention (by means of photometric testing) and on tensile strength loss (by scientific determination of the breaking strength of the laundered fabric as compared with the strength of an original sample).

The Institute's fabric testing service, in which manufacturer's samples are thoroughly checked for all factors of practical launderability, provides a valuable aid to buyers of linens and garments that are to be laundered in the hospital laundry. Through its comparative tests, the laboratory can often save the institutional buyer a considerable sum by insuring that he obtains the best and most serviceable fabric for the money he has to spend.

An expansion of the Institute's testing service for manufacturers of washable merchandise, now in effect for several years, provides for the issuance of a "Laundry-Tested and Approved" seal to be used in identifying those products which have successfully passed the Institute's rigid tests for quality of cloth; color fastness of fabrics, trimmings, threads, buttons; shrinkage; construction of finished product; and all other factors influencing launderability. More than 50 leading manufacturers of washable fabrics and garments have now qualified for use of this seal.

The research department's inspection service on damaged articles also serves as an important aid to hospital laundries in answering the question "What caused the damage?" Damaged articles may be sent in to the laboratory for anaylsis, following which a report is rendered to the laundry indicating whether the fault was that of the laundry, the user of the article, or the manufacturer.

The Insitute's Department of Engineering and Field Service offers valuable assistance in correcting inefficiencies of plant layouts, solving power plant problems, and increasing operator efficiency through time and motion studies. In addition, this department makes available a "field service," through which laundries obtain the services of an experienced engineer, on a fixed daily charge basis, to make a complete analysis and render a report on recommendations for reducing operating costs and increasing productive efficiency.

For the hospital laundry as well as for the professional laundry, the Institute stands as the focal point of the scientific development of modern laundry service.

Repairing Cracks and Holes In Concrete Floors

Every once in a while the problem of repairing concrete floors comes up. The question is asked, "What can be done with a bad crack that leaks water? How can a repair be made that will be both substantial and waterproof?"

Unless there is considerable vibration on the floor, it is a simple matter to waterproof the floor by first cutting out the crack into a V-shaped groove to a depth of at least 2 inches. Sweep water over the newly cut concrete, removing all loose particles of cement and sand. Prepare a stiff and waterproof mortar by mixing together 1 part portland cement and 2 parts clean, sharp sand, and wet down with a solution of 1 part liquid waterproofing and 8 parts of water. Immediately before filling the grooves with this new mortar, brush over the clean, damp surfaces a slush or bonding coat made by stirring into a solution of 1 part liquid waterproofing and 3 parts water enough portland cement to form a thick, creamy cold water paint. While this cement wash is still damp, apply the new mortar and trowel it to a smooth finish.

In a similar way the ruts and holes in a concrete floor can be cut out to a depth of 1½ inches below the finished floor and new patches applied, which will adhere to the underlying concrete and which will be waterproof, hard and dustproof. Patches of this ype harden over night.

Application of Copper Pipe To Hospital Maintenance

By CHARLES N. BOWMAN
Chief Engineer, Methodist Hospital, Indianapolis, Ind.

The 365-day schedule of hospital business makes hospital pipe maintenance an ideal field for permanent piping. Very few hospitals have enough duplication of pipe lines to be able to shut them off without seriously interfering with important and often vital functions.

The life of steel pipe or even wrought iron pipe is short on many services; in addition, leaks occur at too regular intervals and often cause great damage before they can be found and repaired. When one piece of pipe in a line fails you may be sure that the entire line needs to be replaced for it will probably fail when you undertake to repair it. Especially does this seem to be true on Saturdays or just before a holiday.

I have been replacing a great deal of return line piping for years with brass pipe and screwed fittings, but this method, while good, is so expensive that I have never felt that I could go as far with it as I would wish, only using it in the worst cases.

It is only within the last few years that copper pipe has been perfected with soldered fittings which can be installed almost as cheaply as steel pipe and which will last as long as the building itself. Also, it has the extra virtue of being almost 100 per cent reclaimable if for any reason it has to be taken down. It is light in weight, easily handled, requires no threading and can be cut and fitted on the job without numerous trips to the shop. It can be put in close places where it is next to impossible to use a pipe wrench. It can be run down a pipe shaft to replace another line, cross-connected, and the old line removed. It gives off less heat in the air and often does not require covering where it would be imperative to cover steel pipe in the same place. As the inside of the pipe is almost frictionless and the walls thin, a size smaller pipe than the one being replaced can generally be used. Adapters are available for connecting copper to steel piping.

Most engineers, I am sure, have more trouble with small lines handling condensate on sterilizers, cooking kettles and the like, especially those operated intermittently. When these are shut off the pipes cool, joints open, and admit oxygen which, together with the condensate, causes rapid deterioration of the steel pipe. The same thing has no effect on copper.

Solder is available that will handle steam pressures up to 80 pounds, and almost any pressure on cold lines, either liquid or gas. I have had it on service where it was subjected to severe vibrations and water hammers and never had a soldered joint fail.

In water lines laid in new floors or where the sag can be taken care of, soft copper can be bought in rolls and laid in long lengths without any fittings whatever, bending to any shape. On long steam lines soft copper can be used in loops to take care of expansion which is much greater in copper than in steel. Hard copper is usually used on steam and steam returns, not for strength but for rigidity. Soft copper can be fed and pulled in and out of places almost as easily as armored cable and make easy many installations otherwise almost impossible. Copper is now available in all sizes up to and including 12-inch and with all different fittings for plumbing, although I have never used it for sewer lines. It would have the advantage of a smooth surface not catching and holding waste and is also supposed to be repellent to grease accumulations.

From my own experience I feel sure that copper pipe will be of great service in taking some of the pain out of pipe maintenance, especiallly in condensate carriers.

Presented at Tri-State Assembly, Chicago, May 1940.

"Catastrophe Unit" Organized

The organization of a "catastrope unit" of doctors and nurses on the staff of Queens General Hospital, New York City, to function instantaneously in the event of a disaster in the borough of Queens, has recently been announced by Dr. S. S. Goldwater, commissioner of hospitals.

The organization consists of two alternating three-squad units, with four doctors and four nurses on each squad. Two of the there squads are on active call at all times, while one squad is kept in reserve.

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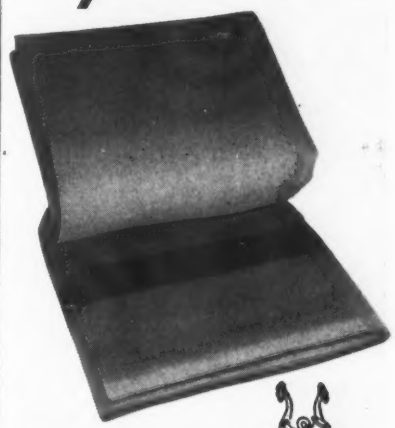

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Cleaning Powder

The following set of questions and answers on cleaning powders, prepared by H. A. Rightmire of The J. B. Ford Co., is taken from the N. E. H. A. "Stickler Contest," held last year.

1. Name the three types of housekeeping or maintenance cleaning operations. Can one powder be used for all three types?

The three types of maintenance are: (a) washing painted surfaces; (b) cleaning or washing marble and tile; (c) mopping floors of all kinds. Yes, one powder can be used for all three.

2. How many square feet of soiled painted surface can be satisfactorily washed at an average with one pound of maintenance cleaning powder?

One pound of cleaning powder will leave 507 square feet of painted surface looking like new.

3. How many washbowls can be cleaned with one pound of maintenance cleaning powder?

230 washbowls, although much depends on the person or persons doing the job.

4. Is volcanic ash an efficient mechanical agent for a maintenance cleaning powder? Why?

Yes, because it is composed of flat flakes and does not scratch the surface to which it is applied.

5. Why does an excess of soap stock in a maintenance cleaning powder increase work for maids and increase cleaning costs?

An excess of soap stock cuts down the efficiency of a cleaning material due to lessened mechanical action; it leaves a film which is difficult to remove entirely and which causes surfaces to soil more quickly with a type of embedded dirt that is very difficult to remove.

6. Can soiled or stained marble be restored to its former beauty by unskilled labor? What would this work cost per square foot if it can be done?

Yes. The method is simple to understand and the powder rather than the laborer does the actual cleaning work. The cost is nominal, about 7 cents per square foot.

7. What is floatability and how does it effect maintenance cleaning operations?

A good maintenance powder when properly mixed with water will form a suspension and will clean more efficiently than it possibly could if the powder had no floatability and settled to bottom of the pail.

8. How much is it possible to increase illumination by washing soiled painted walls and ceilings?

Illumination can be increased 35 per cent by washing soiled painted walls and ceilings.

9. What equipment is needed for efficient wall washing and how should it be done?

Equipment for washing a wall includes two pails (one for solution and one for rinsing), maintenance powder, a sponge for cleaning, one for rinsing and a soft cloth for buffing.

The walls should be washed from the bottom up to prevent streaking. They should be washed with a sponge and a maintenance powder and then rinsed with a clean sponge and clean water. The walls should then be buffed with a soft cloth, beginning at the top and working with an up and down rather than a circular motion.

Care of Chronically Ill

(*Continued from page* 20)

this hospital. Such a hospital focuses attention on the problem and serves as an educational ferment to encourage further development of the general program for the care of the chronic sick. It functions further as a professional center from which in the future will radiate different and correlated service.

Dr. E. M. Bluestone, director of the Montefiore Hospital for Chronic Patients, strongly urges that facilities be developed in connection with existing general hospitals. In an article "Planning for the Chronic Patient" he presented the following points:

The "dumping" process, the isolation and segregation of chronic patients at a distance is inhuman because the chronic patient is an uncompleted scientific problem. Chronic patients are located, after much wandering, in public hospitals. These institutions are mostly in the custodial classification and generally neglectful of their responsibility to both science and humanity.

Dr. Bluestone recommends that the care of chronically ill be integrated with the care of the acutely ill in the general hospital scheme. He feels that chronic patients require the same diagnostic and therapeutic facilities; there is great scientific value in an integrated social, medical, educational, and research plan, for the natural history of disease needs to be studied from infancy to old age in all of its phases, acute, chronic and incurable.

A chronic section in a general hospital is less expensive to maintain than a separate hospital for chronic diseases, according to Dr. Bluestone. The care of chronic patients would proceed in buildings set apart physically from the general hospital and

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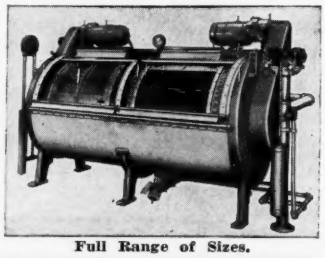

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would be maintained under a unified social and administrative plan.

Moreover the interest of medical men would be aroused as the visiting staff would have selective interest in the various categories of chronic disease and divide their time equitably between the chronic and acute section.

Dr. Bluestone feels that the chronic patient presents a distinct challenge to the general hospital. "Since every case of chronic disease is a complicated problem in pathology, and since the patient is under control over long periods of time, the best medical minds in the community should be assembled for a concentrated attack on the various clinical problem which these patients present."

Record Room Procedure

(*Continued from page* 23)

The work of the medical record department has become highly specialized, requiring at its head a trained medical record librarian. To fill this need the American Association of Medical Record Librarians, through its educational board, has set up a definite curriculum for the training of such persons and has approved certain hospitals where this training may be secured. At the present time there are nine hospitals throughout the country training young women for this work. So great was the need on the Pacific Coast for trained workers that Merritt Hospital received the approval of the National Board and opened its doors for such training in 1938. Most of our students have been spoken for before they have even completed their course of training. There have been five graduates in all, each now holding a position as head of the record department in some hospital in this section of the country. Merritt Hospital is the only hospital west of the Mississippi so far approved for such training.

We have found it a great advantage to have the medical library adjacent to the record department. The doctors get into the habit of coming to the department and naturally become more familiar with it, which makes for friendliness and understanding. Thus we work hand in hand, for without this close cooperation and a record consciousness it would be impossible to keep our medical records on a high standard. Of course there still remain a few doctors who consider us a "necessary evil" and who give their reports reluctantly. In many instances, however, such doctors eventually discover the importance of the record library, especially when suit is threatened! In dealing with the recalcitrants we simply camp on their trail until they "come across" with the information we require.

The record library and the training of record librarians is now being recognized as one of the genuine forward steps in good hospital procedure in the last decade. We of the Samuel Merritt Hospital in Oakland are happy to have had some part, however small. Our success we credit in great measure to the cooperation between the departments of the hospital, the cooperation of the medical profession, and to the progressiveness and understanding of those under whose guiding hands our hospital operates.

A Medico-Legal Problem

The question, "Is the hospital obliged to give the patient's chart to an insurance company demanding it, or in the case of a liability suit either on the doctor or the hospital?" is answered by Paul M. Clark, Denver attorney, in a recent issue of the Bulletin of the American Association of Medical Record Librarians.

The hospital is not obliged and has no right to give the patient's chart to an insurance company demanding it, Mr. Clark comments. It may do so, however, with the consent of the patient and of the doctor in charge. These records ordinarily are not admissible in evidence. Any information derived from a patient by a doctor, and necessary to the doctor's treatment of a case comes under the head of privileged communications and may not be disclosed by the doctor without the consent of the patient.

There is, however, an exception to this rule. That is the case of a suit against a doctor for malpractice or for damages due to alleged negligence in handling the case. In such cases the doctor may testify and may use the hospital records insofar as they are competent and material in his defense. So also may any doctor testify who has seen the patient in consultation with the doctor who is sued. It is my opinion, he continued, that the same rule would and should apply to a hospital where it is made defendant in a suit based upon alleged negligent treatment of a patient. This right on the part of the doctor or the hospital to disclose records and information does not apply in ordinary actions such as accident cases, but only in cases to which either the doctor or the hospital is a defendant in a case where negligence is charged in the treatment of a patient.

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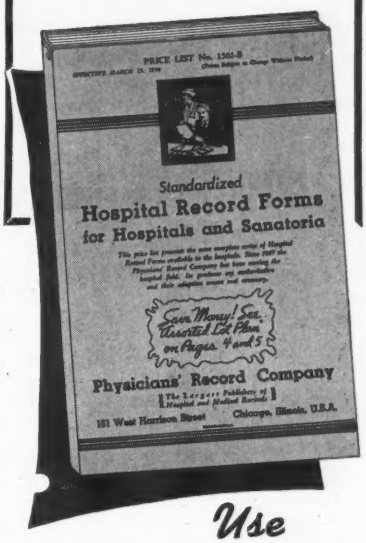
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The Hospital Pharmacist and Drug Therapy

By J. SOLON MORDELL
Chief Pharmacist, Syracuse University Hospital of the Good Shepherd, Syracuse, N. Y.

Since the publication of an article in 1935 outlining the application of a policy of scientific drug therapy in hospitals, much has transpired to affect the practice of pharmacy in the hospital field. Through the efforts of the American Hospital Association, with its Committee on Pharmacy as the instrument, through the writings and activities of prominent therapeutists and pharmacologists, through numerous symposia dealing with the hospital drug situation, through scientifically compiled "approved" drug lists and formularies, and through the increasing attention being given to the division of pharmacy in hospital association programs, a more intelligent conception of the role played by the pharmacy is being achieved. Added to these progressive endeavors, we have the activity of the American College of Surgeons and of the American Medical Association in establishing minimum requirements for the hospital pharmacy.

Pharmacist Interested in Therapy

In the hospital, the pharmacist has a direct interest in the maintenance of a system of rational drug therapy. Under the direction of a physician who thoroughly understands the needs and scope of adequate drug treatment, and who is able to weed out non-essentials, the pharmists can arrange and organize his department so that it is used as a clearing-house of vital, unbiased information pertaining to all phases of drug administration.

At Syracuse University Hospital, the pharmacy operates on a well-defined drug scope, under the guidance of a committee headed by a pharmacologist, designed to meet all therapeutic needs in an effective and scientific manner. The drug list was not formed by simply bringing formulas and drugs into one collection, catalog fashion. Effort was directed toward culling out drugs which duplicated the action of more effective agents or whose effectiveness had never been reasonably demonstrated.

A few examples of the method of approach might be of interest:

Example No. 1

In the consideration and subsequent deletion of Compound Mixture of Opium and Glycyrrhiza (Brown Mixture), the following analysis was made:

Present in each 4 cc. (3i):

Fluidextract of Glycyrrhiza.....0.48 cc. (8 minims) (Probably of value as flavor only)

Antimony and Potassium Tartrate...0.00096 Gm. (1/75 grain) (Contrast with average U.S.P. dose of 0.003 Gm. (1/20 grain)

Camphorated Tincture of Opium....0.48 cc. (8 minims) (Morphine content: 0.00024 Gm. (1/250 grain) Contrast with average U.S.P. dose of 4 cc. (3i), morphine content: 0.002 Gm. (1/32 grain)

Spirit of Ethyl Nitrite.....0.12 cc. (2 minims) Contrast with average U.S.P. dose of 2 cc. (30 minims)

Glycerine, Water, Alcohol (9 to 11%).

Incompatibilities present: 1. Spirit of Ethyl Nitrite is readily decomposed into alcohol, aldehyde, acetic acid, nitrous acid, nitric acid.

2. Antimony and Potassium Tartrate decomposed into basic antimony nitrate and some potassium bitartrate.

3. Morphine converted into nitrosomorphine and pseudo-morphine, compounds which are inferior in action to morphine.

Question: How effective is it?

Example No. 2

Extract of Witch Hazel (Aqua Hamamelidis).

This is used as an astringent hot pack and astringent wet dressing. Many believe it to be a tannic acid astringent. Since Distilled Extract of Witch Hazel is, as its name implies, a distillate and not an extract, it is necessarily tannin-free, as may be demonstrated with the ferric chloride test. Ferric chloride solution when added to a 1:25,000 solution of tannic acid will yield the blue-black color of ferric tannate. Ferric chloride solution added to undiluted Distilled Extract of Witch Hazel gives a negative test for tannin. Essentially this preparation is nothing more than 15% alcohol with the witch hazel odor. It will do no more than a 15% watery solution of alcohol will do—any odor may be added, if desired. The analysis of the preparation was based on the rationale of its use in the hospital.

There are numerous similar examples of this method of approach used in exposing old favorites which have been handed down and perpetuated, and whose position in hospital drug therapy is very much open to question.

Pharmacy Bulletins Valuable

As part of the program of enlightened pharmacy practice in hospitals, periodical pharmacy bulletins dealing with specific problems have proved an effective mode of contact in many institutions. These bulletins are posted in staff rooms and, if desired, may also be issued to each staff member individually. Material such as the above analyzed preparations, as well as new developments in general, may serve as subjects for these bulletins.

The basic material of a planned drug scope should obviously center around the drugs which appear in the official texts. Fortunately, by the process of interim revision, there are now fewer instances wherein new and acceptable non-official preparations are not paralleled by some official drug. The Council on Pharmacy and Chemistry of the American Medical Association serves as a valuable source of appraisal of non-official agents. In addition, we now have the aid being rendered under the operation of the new Federal Food, Drug and Cosmetic Act.

Presented before the Sub-Section on Hospital Pharmacy, American Pharmaceutical Association, Richmond, Va., 1940.

Another phase which definitely affects the use of drugs in the rather widespread doctrine of simplification —the use, whenever possible, of single drugs for the cure or alleviation of definite ailments. With the acceptance of this principle, much can be accomplished in the way of clearing out complex and unnecessary concoctions which clutter many hospital pharmacies.

It is essential that an especially qualified physician who possesses an unbiased and scientific approach to the matter of drug therapy, and who does not allow himself to be hampered by the fallacies of a predominantly empiric attitude, be the liaison officer between the hospital staff and the pharmacy. In most instances, this relationship has been further enhanced by a Pharmacy Committee having as its chairman the type of physician described, and as members, representatives of each of the various services together with the pharmacist. The selection of a definite drug scope and rules for its observance may thus be made, with critical consideration given to each drug presented for approval. What seems to be a necessary concomitant in the program is the sympathetic assistance and support of the physician in charge of each type of medical and surgical service. This cooperation is indispensable to the successful operation of the plan.

Drug List Not Inflexible

It is important that the establishment of an approved drug scope should not give any impression of finality or inflexibility. The basic list of drugs should cover every known therapeutic need, but it will defeat its purpose if used as a rigid, policing code. It should be made clear that suggestions as to drug additions are encouraged. However, some regulatory method for considering these suggestions is necessary, or there will no longer be any recognized scope.

It seems fair to require that the suggested addition of a drug be accompanied by an outline of the reasons for the request. The Pharmacy Committee then considers and analyzes these requests and if advisable may introduce the drug for limited clinical trial, the original proponent being required to justify its continuation as a permanent addition. In this way the "valueless evaluation" by impression is courteously discouraged. In some institutions special printed forms are provided for recording requests for new drugs.

What are the benefits to be derived from this entire program? We as pharmacists in hospitals are faced with a complex problem when lack of organization of therapeutic endeavor prevents an orderly management of our affairs. The presence on our shelves of a score or more of analgesics where just a few will suffice, of countless other duplications of items which differ only in respect to the trade-marked names applied, is an increasing burden and barrier in the economical operation of our division.

At this point it must be emphasized that the main objective is the perfection of therapy as far as possible and not merely an attempt to cut costs. However, it is significant that the accepted, standard drug is coincidently, in most cases, found to be the less costly one. This is by no means intended to cast reflection upon ethical manufacturing firms, by whom thousands of dollars are spent in research and in the development of new therapeutic agents, and who provide standard drugs without resorting to the sharp practices of their highly commercialized competitors.

Many of the problems involving manufacturing in the hospital pharmacy are directly related to the drug policy, or lack of such policy. One of the most flagrant examples lies in the field of cough mixtures. Pharmaceutical literature reveals statements by many hospital pharmacists as to the unnecessarily complex collection of such remedies. Intelligent scrutiny of the situation resulted in reduction from eight, ten, or more mixtures to two or three, without sacrifice of therapeutic efficacy. The same situation applies to powders and ointments. A pharmacy stock which attempts to supply every known bromide salt where one bromide will suffice is again being questionably burdened.

The field of barbiturate therapy is one whose fertility calls for some "plowing-under." The U.S.P. now provides long acting and short-acting barbiturates in the form of barbital, phenobarbital, and pentobarbital. The use of this class of drugs may well be based on these official forms. One would have to include the intravenous barbiturates for short anesthesia. In some instances an intermediate and a very short acting form may be indicated. In any event, one representative for each type of action should suffice.

In the vitamin field there are uncountable duplications available for most of the vitamins. The Pharmacopoeia has now taken care of a representative portion of the vitamin alphabet in the form of an A concentrate, an A and D concentrate, a D concentrate, Cod Liver Oil, Thiamin Hydrochloride, and Ascorbic Acid.

We are fortunate that it is no longer necessary to flounder in a maze of vitamin preparations which conformed to no definite standard. It is gratifying to note the number of manufacturers who are supplying Pharmacopoeia potency vitamin preparations, and who are using Pharmacopoeia nomenclature.

Use a Scientific Nomenclature

A discussion of the subject of drug therapy in hospitals would not be complete without some mention of the important, yet often neglected role played by the use of scientific nomenclature. It is not an academic problem, but one bearing definite practical significance. From the standpoint of the pharmacist, and the nurse as well, adherence to standard official nomenclature will automatically eliminate many difficulties. The use of all sorts of common names on the hospital wards is obviously a source of confusion and danger to the patient. An order for Lassar's Paste means little when one recalls the number of Lassar Paste formulas. An order for Paste of Zinc Oxide, or for Paste of Zinc Oxide with Salicylic Acid, or for Mild Paste of Resorcinol, limits the request to one and only one formula. "Oil of Betula" or "Oil of Sweet Birch" may be interesting from a romatic angle, but "Methyl Salicylate" is ideal for practical purposes. The use of multiple names becomes absurd when one recalls a classic prescription which was published as a horrible example some years ago. This prescription called for a mixture of five drugs which were actually five different names for "methenamine."

When rather long or complicated titles do not have as a crutch such names as "aspirin" or "phenacetin," physicians readily learn the more correct longer names. The word "sulfanilamide," "sulfapyridine," and the like are used without question simply because they have been the only designated names. The Food, Drug and Cosmetic Law enters the picture by reason of its insistence on definitive names. It is interesting to note that those who complain about drug titles do not object to names in anatomy, causes of disease, and names of surgical operations! If a "laparchysterosalpingo-oophorectomy" can be tolerated then "desoxycorticosterone" becomes blissfully simple.

May I urge the serious consideration of a policy of nomenclature which is based on the use of official titles only, both in the labeling of drug containers and in conversation. As a result the problem of proprietary names

and duplication of stock because of them will clear up very astonishingly. What is so very significant is the fact that the purchase of drugs under correct names invests the pharmacist with freedom of choice and specification, based on definite, unbiased standards. The manufacturer who can supply the properly labeled product receives the preference. Whereas slavish adherence to standardization may in many instances be an impedident, the use of official titles is one form of standardization whose benefits are directly proportional to the stringency with which it is observed.

Study Made of Inexpensive Method of X-Ray Examination

Development of a relatively inexpensive method of applying x-ray examination to large groups of people in tuberculosis case finding was described in a paper recently delivered before the Radiological Society of North America by Drs. Hollis E. Potter, of Chicago, Bruce H. Douglas and Carl C. Birkele, of Detroit.

Reporting on a study of 1610 cases, on which both regular 14″x17″ radiographs and 4″x5″ photographs of the fluorescent image were made for comparative diagnosis, their method of photo-roentgenography was characterized as a "type of examination which can be applied . . . to large numbers rapidly and economically," having "definite advantages over certain other x-ray methods," which "can be applied directly without preliminary tuberculin testing," and which "offers a practical method for case finding in tuberculosis for use in surveying large numbers in susceptible groups."

After giving recognition to the work previously carried on by others in an effort to achieve a similar objective, the authors pointed out that Dr. Potter, in consultation with the General Electric X-Ray laboratories, after much study and experimentation arrived at the conclusion that the most desirable objective in photography of the fluorescent image should be to produce a small film, small enough to make a real economy in its use, and yet large enough to be readily interpreted without enlargement, or at least no greater enlargement than that provided with a simple reading glass.

Working on this basis it was found that a 4″x5″ film with an effective focal range slightly smaller than this would answer the requirements.

Special equipment for producing such photo-roentgenographs has been designed by General Electric X-ray Corp. The technique of producing this film requires a modern x-ray installation with capacity to permit exposures of from 20 to 80 milliampere-seconds at from 60 to 80 kilovolts, an impulse timer, and a tube-screen distance of 50 inches or 125 centimeters, thus producing as little distortion as possible.

The fluorescent screen used is nearly seven times as fast as the regular fluoroscopic screen, and the lens is also a specially prepared instrument with a rating of F.1.5, and is mounted in a tunnel with the screen at the opposite end so that both can be moved up and down to adjust to the proper level for a patient standing upright. This lens is capable of producing a very sharp image in an area of about 3.7 inches in diameter on the 4″x5″ film.

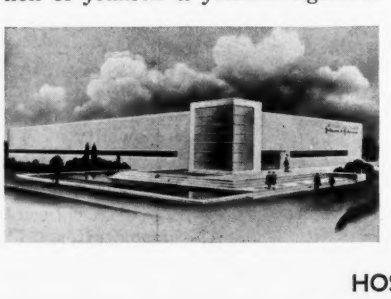
Roche-Organon Announces New Heparin Preparation

A highly potent heparin preparation has been announced by Roche-Organon, Inc., Nutley, N. J. Marketed under the name of Liquaemin, this new product is reported to cut the cost to a point where routine use in surgical patients as a prophylactic measure against possible postoperative thromboses, pulmonary emboli, and phlebitis may at last be contemplated, at least among private patients.

Liquaemin is being marketed in 5 cc. rubber-capped vials, each vial containing 10,000 anti-coagulant units. The most generally satisfactory method for administering the product is said to make use of a continuous infusion of Liquaemin in saline or glucose solution.

WITH THE SUPPLIERS

Johnson & Johnson, New Brunswick, N. J., has started construction of a new building to house its Ligature Laboratories, in Milltown, N. J., a few miles from the main factory of the company. The building, which will be completed about Nov. 1, will be used for the finishing and sterilization of Johnson & Johnson ligatures and sutures, and for laboratory control and research. The architectural design of the building draws its theme from the "World of Tomorrow" style of the New York World's Fair. The structure will be 187 feet long and 100 feet wide.



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Russell M. Allen, general sales manager of Allegheny Ludlum Steel Corp., Pittsburgh, has announced the appointment of C. R. Mitchell, Jr., as assistant district manager of sales for Allegheny's New York District office.

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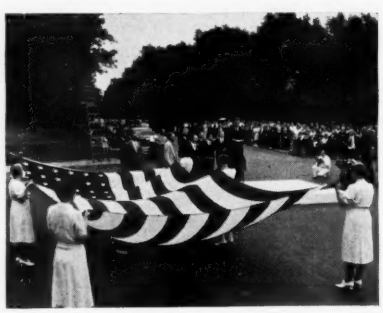


Celebrating the Fourth of July and its especial significance to America this year, 1,600 employees of the Rahway Division of Merck & Co. held exercises in Rahway, N. J., and presented to the company a giant American flag. The flag was brought forward by a color guard composed of representatives from each of the six major departments of the plant, and was accepted for the company by President George W. Merck.

•

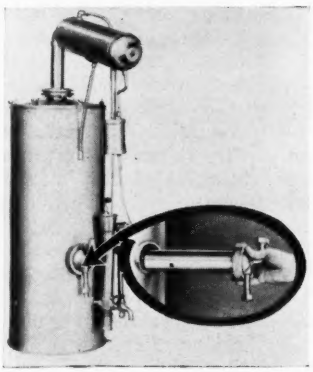
Alfred W. Bays and Henry B. Shattuck, trustees under the will of the late Clara A. Abbott, announced this month the formation of a benevolent corporation to be known as the Abbott Foundation to which will be transferred by the trustees assets of about three-quarters of a million dollars for the purpose of establishing an Old Age Pension Fund and other charitable benefits for employees of Abbott Laboratories and their dependents.

•

E. A. Kleinschmidt, executive vice-president of the York Ice Machinery Corp., York, Pa., has announced completion of an arrangement whereby the company's salaried employees will have the benefit of approximately a 40 per cent increase in group life insurance, as well as accidental death and dismemberment protection. In addition, hospitalization and surgical fee benefits are being liberalized at no additional cost to the employees.

New Appliances and Equipment

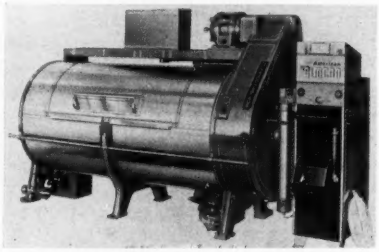
Cleaning Device For Water Stills



The Barnstead Still and Sterilizer Co. has introduced a new heating device which is said to make their hard water type stills far easier to clean than before. The new "bayonet" type steam heating element can be quickly unscrewed and removed from the evaporator when cleaning is necessary. With this method, the heating device is readily accessible, easily handled, and it is unnecessary to remove the top or any other part of the still.

This new type heater is available only on the small 1 to 5-gallon per hour steam-heated hard water type still.

"Almcon Mechanical Washman"



The American Laundry Machinery Co. has recently introduced a new automatic washer, trade-named the "Almcon Mechanical Washman." In washing with the new unit, the firm's announcement states, the duties of the human operator are limited to (1) loading the washer with work, (2) inserting the correct formula disk for that classification of work, (3) filling the supply tanks with the soap, bleach, sour and blue required for that load, and (4) starting the washer and control. From that time on, the washing process is under constant regulation and requires no further attention from the operator.

The Mechanical Washman, it is said, performs every operation of the washing cycle automatically. At the right instant it operates the dump valves; admits water to the washer properly tempered and in correct amounts for each bath; measures the amount of soap and supplies and injects them into the stream of incoming water as it enters the washer; accurately times the duration of each bath after the proper washing conditions have been reached, and raises the bath temperature for any selected bath to the temperature desired.

When the entire wash has been completed, the dump valves are opened, a whistle blows and a red lamp is lighted, which inform the operator that the wash has been completed and is ready to be unloaded.

Rock-bottom washing costs are said to be secured because the entire washing process is under constant vigilance of the Mechanical Washman.

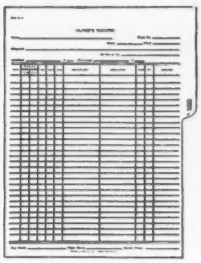
Modernized Washrooms

Greater sanitation and lower cost maintenance in washrooms are said to be obtained with suspended glass toilet stiles and partitions of a newly developed design, as shown in the accompanying photograph of the washroom in the Bankers Life Co. building in Des Moines, Ia.

Stiles are suspended from a steel channel concealed within a wall partition dropped about two feet from the ceiling. A steel hanger attached to the metal framework of the composition core within the stile fits into the steel channel above. All brackets and hinges have been replaced with hardware that attaches directly to metal blocks concealed within the core, leaving the glass free for thorough cleaning.

The suspended partitions and wall mounted lavatories and bowls permit a floor free from all obstructions. Other innovations include the stream-

CASE RECORD SHEETS



(Tab-In-Dex System)

Summary	Form No.	1
Physician's Directions	" "	2
Progress Record	" "	3
Graphic Chart	" "	4
Nurse's Record	" "	5
Laboratory Record	" "	6
Case History	" "	7
Anaesthesia Chart	" "	8
Operative	" "	8-C
Ear, Nose and Throat Record	" "	9
Pregnancy and Labor Record	" "	9-OB
Obstetric Record	" "	10-C
Newborn Record	" "	10-NB
X-Ray Requisition	" "	10-XR
Consultations	" "	11
Fracture Record	" "	12
Religious Record	" "	13
Eye Record	" "	14
Diet Record	" "	15
Diabetes Chart	" "	16
Diet Record for Diabetics	" "	17
Admission Agreement	" "	18
Analysis of Hospital Service	" "	19
Dental Record	" "	20

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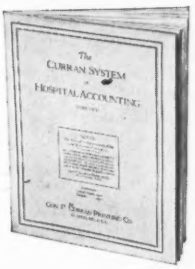
MANUAL FREE TO ALL USERS



General Cash Receipts	Form No.	1
General Cash Disbursements	" "	2
Petty Cash Voucher	" "	3
Voucher Register	" "	4
Voucher Distribution	" "	5
Voucher	" "	6
Patients Registry Card	" "	7
Daily Census	" "	8
Daily Report of Special Charges	" "	9
Patients Ledger	" "	10
Board and Room of Patients	" "	11
Stores Requisition	" "	12
Stores Record	" "	13
Payroll	" "	14
Income and Expense Statement	" "	15
Balance Sheet	" "	16
Journal	" "	17
Patients Register	" "	18
General Ledger	" "	19

BINDERS AND INDEX SHEETS WITH TABS

CON. P. CURRAN PRINTING CO.

Eighth and Walnut Streets ST. LOUIS, MO.

lining of the exposed part of hinges, a newly designed flush valve with a single treadle providing separate contacts for hand or foot operation, a disposal unit for towels built into the glass wall surfacing, and mixing spray faucets in stopperless lavatories to add to sanitation and reduce water consumption.

Explosion-Proof Switch

Micro Switch Corporation has announced an explosion-proof housing, measuring 3⅝ by 2½ by 2 inches, designed to make use of the firm's Micro Switch as the switching element.

The new switch was designed, it is reported, for use in hazardous locations—atmospheres containing vapors of ethyl ether, gasoline, alcohol, acetone, lacquer solvents, etc.

The types of actuation now available are the roller arm with the axis of the roller either parallel to or at right angles to the arm, and a bullet nose push rod type. All types have precision characteristics with a maximum movement differential of .001 inch.

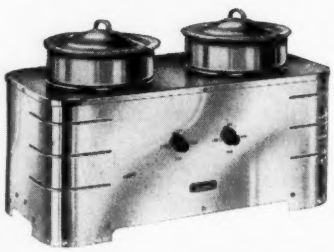
A removable cover plate provides easy access to rugged terminals, which are well supported on the switch element itself and accept No. 14 solid wire.

Bulk Ice Makers

Ranging in capacities from 75 pounds to one ton of ice per day, the Carrier Corp. offers a new line of eight cabinet sizes of bulk ice makers. The 18-gauge, galvanized copper-bearing steel exterior is designed to withstand rough treatment. Metal-clad swing lids are equipped with anti-freeze gaskets to assure positive sealing when closed, but easy opening.

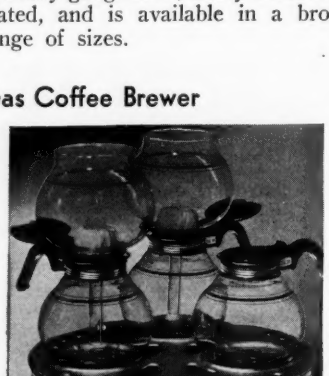
Automatic expansion valves and thermostatic controls built into each model are said to insure economical operation and proper temperatures at all times. To provide easy removal, the ice making cabinets are fitted with tapered cans. Heavily galvanized, the cans are coated on the outside with a special brine-resistant paint.

Toastwell Food Warmer



Utility Electric Company has recently developed a new food warmer, illustrated above, which is said to keep food at perfect serving temperatures. Each pot is controlled by a single switch that regulates low, medium or high heat. The unit is made of heavy gauge steel, heavy chromium plated, and is available in a broad range of sizes.

Gas Coffee Brewer



Glass Coffee Brewer Co. has recently placed on the market this new glass coffee brewer (Model No. 403), which is said to provide three-burner capacity in two-burner width and designed to be used where kitchen space is limited. All three burners provide both high and low heat, with positive, individual heat control, using one valve for both high and low flame. Rated capacity of this brewer is 140 cups an hour.

Duke Endowment

(*Continued from page* 17)

by the single fact, as stated by Dr. Rankin, that 63 per cent of general hospital Negro patients and 31 per cent of white patients were cared for in 1938 free of charge. This in turn emphasizes the vital part in the picture played by the Duke Endowment and by philanthropic and tax funds in general in enabling Carolina hospitals to handle the job of improving the care of the sick in their section to a point more nearly approximating the national averages than is now the case. It can be assumed, however, that the Carolina situation, thanks largely to the work of the Endowment, is substantially better than that in most of the other Southern states.

It should be added that in its allocation of funds for construction purposes the Endowment authorities exercise a liberal discretion, once the basic requirements are met. Thus, in 1938, a fairly typical year, funds were provided not only for a number of new hospital units, but for two additions, for five nurses' homes and, in at least four cases, for needed equipment in existing institutions. It is hardly possible to close any study, however brief, of a philanthropic foundation without comment on the problem which faces a great many hospitals supported in part by the proceeds of invested endowment funds, that of sharply reduced income from this source. This problem also faces the Duke Endowment, although to a slighter degree than has been the case with many other trusts. Except for the first year, there has always been enough to pay the fixed rate of $1 a day to hospitals for free care, leaving a varying but substantial amount for construction and other aid.

In 1930 it was able to contribute to the hospitals of the Carolinas the sum of $1,385,733.69. The lowest figure since that time was recorded at the bottom of the depression, when in 1932 only $823,876.74 was available; and since then, in spite of the steady addition to the corpus of the trust of 20 per cent of the income each year, the amount available for the hospitals did not reach the 1930 figure until last year, when $1,475,265 was distributed.

Up to this point, therefore, the wisdom of the founder and the trustees has fought a winning battle against the difficulties of the times; and it is to be hoped that, for the good of hospitals in the Carolinas, these constructive factors will continue to operate successfully, since so far the work has been so helpful to the institutions in these two states.

Suppliers' Library

Request to HOSPITAL MANGEMENT will bring these new folders and latest information about equipment and supplies. Ask for them by number for convenience.

No. 930. Ritter **fluorescent lighting** and the firm's **new ear, nose and throat unit** are described and illustrated in two folders, issued this month by the Ritter Equipment Co., Inc.

No. 929. The Permutit Co. has published a 32-page book on its **hot process water softeners.** Described are the five types of deaerating and non-deaerating heaters and the principle and function of each unit part is explained.

No. 928. Lehn & Fink Products Corp. has for distribution a monograph by Dr. Emil G. Klarmann on **Amphyl,** the firm's new disinfectant. Also available is a chart, "How to Use Amphyl."

No. 927. Cutter Laboratories has issued a small folder on its **vacuum transfusion outfit.**

No. 926. **Duraclay,** a new product for the manufacture of sinks, bathtubs and other sanitary fixtures, is the subject of an announcement issued recently by the Crane Company.

No. 925. **Octo-Solve,** a newly developed soapless, non-acid, non-caustic liquid cleaning compound is the subject of a folder issued this month by Brulin & Co., Inc.

No. 924. H. G. Fischer & Co. has issued a four-page pamphlet on its line of **ultra violet generators.**

No. 923. The **Steritube,** to keep a syringe (with needle attached) sterile until it is needed, is the subject of a folder published this month by Becton, Dickinson & Co.

No. 922. Metropolitan Wire Goods Corp. has published a folder on its line of **sterilizing baskets** for glasses, cups and dishes.

No. 921. A 42-page manual on **proper floor maintenance** has been issued by Hillyard Sales Co.

No. 920. James L. Angle Furniture Div. of Carrom Industries has a new mailing piece on the new Dr. Urie "Patient Comfort" **bed spring.**

No. 919. W. W. Wilcox Mfg. Co. has issued Catalog H-2 on its line of **front office equipment** for hospitals.

No. 918. "At Your Service" is the title of a new pamphlet which describes Aznoe's **placement service for trained personnel** in the hospital and medical field.

No. 917. Abbott Laboratories has for distribution small folders on the following items in its line: **Progestin; Nikethamide,** an analeptic and circulatory stimulant; and **Kayquinone,** a synthetic substance which has to a high degree the activity of vitamin K extracted from natural sources.

No. 916. **"Plaster Casts—Their Preparation in the Hospital,"** a 74-page illustrated booklet covering the hospital handling of crinoline and plaster, is available from Lewis Manufacturing Co.

No. 915. Hoffmann-La Roche, Inc., has for distribution small folders on the following items in its line: **Larostidin** for the treatment of peptic ulcer; **Syntrogel Capsules,** a remedy for the control of gastric hyperacidity and flatulence; **Vi-Penta Perles** and **Vi-Penta Drops; Imadyl Unction,** to relieve the pains of rheumatism, neuralgia, and neuritis; **Elixir Alurate,** a liquid hypnotic; and **Citro-Thiocol,** a cough remedy.

No. 914. The Cunningham Co. has recently published two folders on its **glass washing and sterilizing system** and its complete line of glass and dishwashing machines.

No. 913. Literature describing and illustrating the American Laundry Machinery Co.'s new automatic washer—**The Almcon Mechanical Washman**—has recently been published.

No. 912. G. S. Blakeslee & Co. has for distribution literature on its new line of Blakeslee-Built **kitchen mixing machines.**

No. 911. The latest type Carrier **ice cube maker** is described in a new folder issued by Carrier Corp.

No. 910. Philadelphia Quartz Co. has inaugurated a new service for hospital laundry managers entitled **"Question and Answer Book of Washroom Practice."** The firm supplies a folder and a monthly data sheet containing suggestions for improving and benefitting washroom practice.

No. 909. An illustrated circular on **cellulose acetate shields** for laboratory instruments has been issued by E. J. Kanter & Co.

No. 908. American Hospital Supply Corporation has announced this month the issuance of its new catalog. Beautifully printed in ten colors, it is indexed and arranged for instant reference to any of the 8,000 items included in its line of **hospital equipment and supplies.**

No. 905. United States Rubber Company has issued a 16-page booklet entitled "Why Hospitals Prefer Mattresses and Cushions of U. S. Royal Foam." Illustrated and described are the firm's **latex mattresses, pillows, operating table cushions, stretcher cushions, wheel chair cushions, bed rings** and **knee cushions.**

No. 902. James L. Angle Furniture Co. has for distribution a series of mailing pieces on its **hospital room suites.** Each complete suite is illustrated in color.

No. 900. "A Major Contribution to Surgical Asepsis" is the title of a new booklet describing the Levernier portable **foot pedal soap dispenser,** recently issued by The Huntington Laboratories, Inc.

No. 893. Physicians Record Co. has issued five new price lists: No. 1501-D on **Standardized Hospital Record Forms;** No. 1503-E on **Bound Record Books and Loose Leaf Systems;** No. 1519-B on **Medical Staff and Intern Records;** No. 1502-B on **Record Forms and Supplies for Schools of Nursing;** No. 1524-D on **Penn-Ward System of Hospital Accounting;** and No. 1518-C on **Hospital Indexes.**

No. 888. A 66-page catalog has been issued by Metropolitan Wire Goods Corp. describing and illustrating its complete lines of Metro **wire utensils and baskets** and Sani-Stack **cup, glass, plate and bowl racks.**

No. 884. A new safety double-acting **over-bed table** is described in a mailing piece issued by the James L. Angle Furniture Div. of Carrom Industries, Inc.

No. 883. Bulletin No. 2345, issued by The Permutit Company, illustrates and describes the firm's new oscillating type **dry chemical feeder for conditioning water.**

No. 880. Multi Products has issued a small folder on its new **"Airfoam" pillow,** made of cellular latex.

No. 879. A new 32-page catalog, issued by the Milwaukee Lace Paper Co., illustrates and describes the firm's line of **doilies, cake laces, tray covers, place mats,** etc.

No. 876. A new **chromium jacketed water bottle** is the subject of a new folder issued by Will Ross, Inc.

No. 875. **"Modern Catgut,"** a 30-page booklet recently published by Lewis Manufacturing Company, presents a discussion of certain chemical and physiological aspects of catgut sutures, with particular emphasis on factors that affect the absorption rate and the surgical reliability of the suture.

No. 871. The Davies-Young Soap Co. has for distribution two new pamphlets —one on "Buckeye" **liquid wet cleaner**

and one on the firm's **wet cleaning soap mixer.**

No. 870. Complete information on the new Triumph **emergency lighting unit** is contained in two mailing pieces issued this month by Triumph Explosives, Inc.

No. 869. **"The Uses of Elastic Adhesive"** and **"The Uses of Ace Adherent"** are titles of two pamphlets recently issued by Becton, Dickinson & Co. Also available are two descriptive pieces on the B-D Yale Luer-Lock Syringe and the Asepto syringe.

No. 868. **"Hospital Service Book and Catalog No. 4,"** issued by Johnson & Johnson, describes and illustrates the firm's line of surgical dressings, sutures, orthopedic specialties, etc.

No. 867. A 24-page booklet, **"The Basis of Ultraviolet Therapy"** and complete descriptive literature on the Hanovia line of ultraviolet lamps for therapeutic use is available from the Hanovia Chemical and Manufacturing Co.

No. 866. Fixt Products has recently issued a new booklet titled **"76-Fixt Recipes"** for its prepared flour mixes. Also available is a mimeographed bulletin containing 104 **waffle recipes.**

No. 865. American Mat Corp. has for distribution several new pieces of literature on its lines of **"Ezy-Rug" floor matting,** "Amatco" corrugated matting, and "Air-Tred" matting.

No. 864. A 16-page booklet entitled **"Allergy Products,"** with recipes for use in wheat-free, egg-free and milk-free allergy diets, is available from Chicago Dietetic Supply House, Inc.

No. 863. Literature describing **Deknatel Surgical Nylon,** a new type of surgical suture, is available from J. A. Deknatel & Son, Inc.

No. 860. Norton Door Closer Co. has available a new catalog (No. 21) which illustrates and describes its complete line of **door controlling devices.**

No. 858. Citrus Concentrates, Inc. has a new folder on its pure **concentrated orange juice.**

No. 853. **"Washroom Facts,"** a 48-page handbook outlining the fundamental principles of good washing and their application to the special problems of the hospital laundry, has recently been published by Procter & Gamble. Also available is a small booklet on "Suggestions for the Use of Orvus," Procter & Gamble's **soapless soap.**

No. 852. **"The Fine Art of Making Tasty Salads and Salad Dressings"**—a 28-page booklet containing a number of recipes for salads and dressings—has recently been issued by Procter & Gamble, together with two small folders on the firm's Puritan oil.

No. 850. The new Guardian line of "Crutch-Eze"cushions and "Safe-T-Grips," **non-skid shock absorbers for crutches,** is described in a folder published recently by Guardian Latex Products, Inc.

No. 845. A folder has been made available by the Good-Lite Company describing its parallel beam **examination and operating headlight.**

No. 840. John Van Range Company has for distribution two new folders—one on "Van" **stainless steel and galvanized sinks,** and one on the firm's line of **steamers.**

No. 839. A new 48-page catalog issued by the Autosan Machine Division of Colt's Patent Fire Arms Mfg. Co. contains description and specifications of the firm's large line of **dishwashing machines.**

No. 838. New booklet recently issued by Metropolitan Wire Goods Company describes and illustrates the firm's complete line of Sani-Stack **cup, glass, plate, tray, silver, pot and bowl racks.**

No. 835. Imperial Brass Manufacturing Co. has for distribution a new folder on its line of **bronze signs and name plates.**

No. 824. New catalog published by Cleveland Range Co. describes and illustrates the firm's complete line of **steam cooking equipment.** Also available is a booklet entitled "Getting the Most From Steam Cooking, which contains valuable information on the commercial application of steam cooking.

No. 822. A booklet entitled **"A Scientific Method of Silencing Flush Valves,"** published by Imperial Brass Mfg. Co., contains description of the firm's new line of silent-action valves.

No. 821. Super Ironer Corporation has issued Bulletin HFN describing and illustrating its three **new automatic folders**—a single-purpose folder for large articles, a single-purpose folder accommodating up to six lanes of small pieces, and a combination folder capable of handling all sizes of flatwork.

No. 819. A complete line of **food conveyors,** tray conveyors, tray service and dish trucks, kitchen and special trucks, together with accessory equipment, are illustrated and described in a 20-page catalog, issued recently by S. Blickman, Inc.

No. 816. A 104-page catalog on **fracture appliances** and their application has been published this month by DePuy Manufacturing Co. The book contains practically any appliance required in the treatment of fractures and shows how to use them.

No. 814. **"A Suggested Standard Nursery Technique for the Routine Care of the Newborn in the Nursery"** is the title of a new 16-page booklet issued by The Mennen Company.

No. 813. Applegate Chemical Co., makers of **indelible inks and linen markers,** have for distribution a small 12-page catalog and list price. Included is a description of the firm's linen marking system.

No. 809. "The Heart of a Hospital"—a 16-page manual describing the Curran system of **hospital accounting**—has been published by the Con. P. Curran Printing Company. A complete set of sample **clinical records** is also available for distribution.

No. 797. Now available from The Tablet & Ticket Co. is a 36-page catalog illustrating and describing the firm's complete line of **changeable letter signs.** Price list is included.

No. 788. Literature on Buckeye **surgical soap** and details regarding a free offer of a soap dispenser are available from the Davies-Young Soap Co.

No. 757. Fixt Products has recently issued two small pamphlets in which are featured two of the company's products **—Fixt waffles and griddle cakes.**

No. 748. The features and uses of **Lysol disinfectant** are described in a new leaflet recently issued by Lehn & Fink Products Corporation.

No. 687. All types of **floor matting** and the correct application of each one in the hospital field are discussed in detail in a new catalog published by the American Mat Corp. The various ernization, cleaning costs, and comfactors which induce the installation of floor matting—safety, sanitation, modfort—are also discussed.

No. 668. **"Lighting in the Surgery,"** a new catalog of surgical lighting equipment, has been published by the American Sterilizer Company.

No. 518. **"A Complete System of Medical Records for the Hospital."** A new booklet presenting a check-list of approved forms which comprise the clinical chart of the patient; also those which are used in the admitting, accounting and other departments to form a complete system. Prepared by the Physician's Record Company.

No. 441. **"Sanitation Products for the Hospital."** A complete catalogue of Surgical and Baby Soaps and their dispensers, Baby Oil, Disinfectants, Floor Finishes, Floor Waxes, Furniture Polish, and other Hospital and Institutional supplies. The Huntington Laboratories.

HOSPITAL MANAGEMENT, 100 E. Ohio St., Chicago, Ill.

Please send me, without obligation, the booklets as listed in the Suppliers' Library, the numbers of which are circled below:

930	923	916	909	884	870	863	840	819	757
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928	921	914	905	880	868	858	838	814	687
927	920	913	902	879	867	853	835	813	668
926	919	912	900	876	866	852	824	809	518
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924	917	910	888	871	864	845	821	788	...

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